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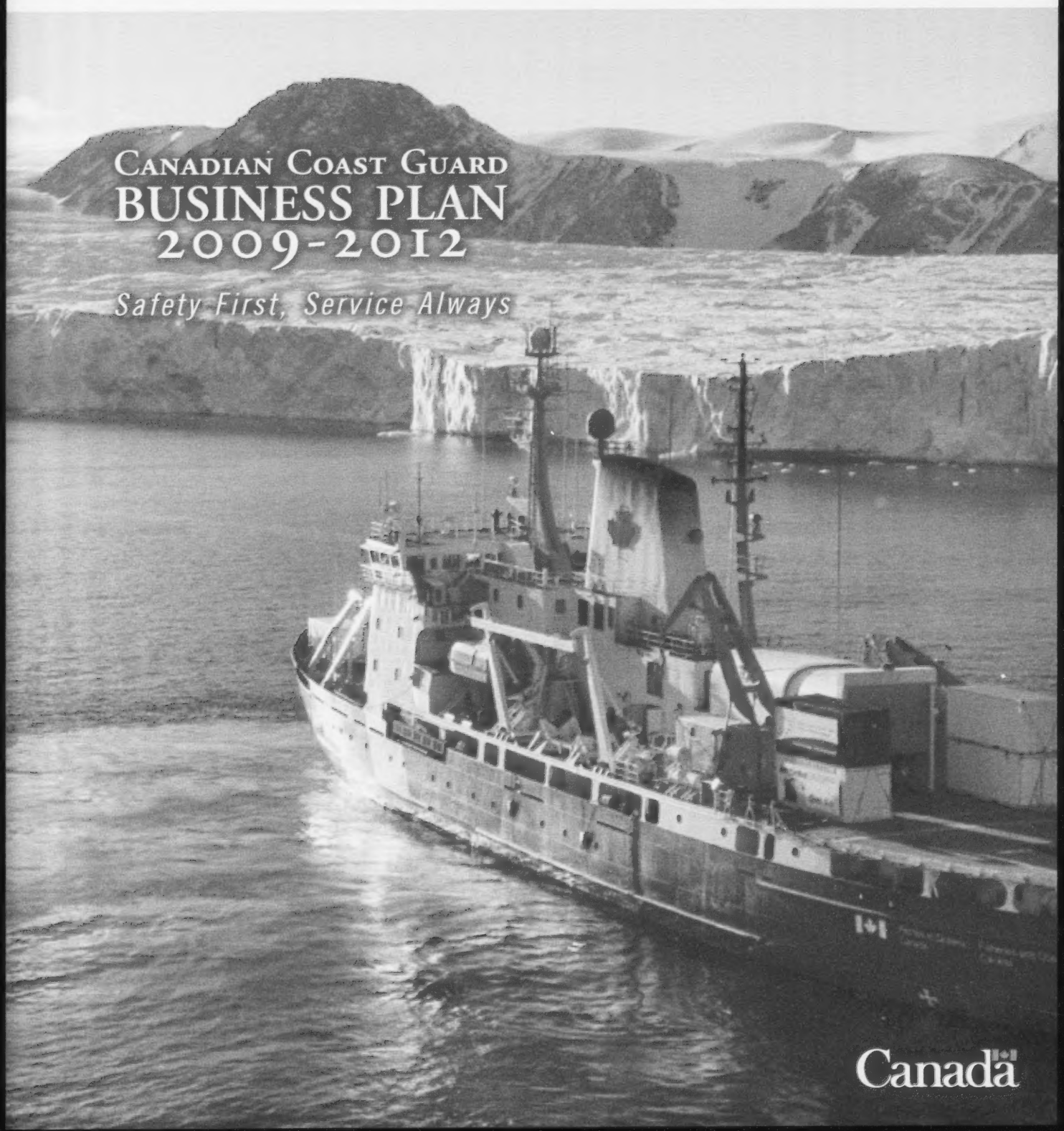
Canadian Coast Guard | Garde côtière canadienne

Canadian Coast Guard
BUSINESS PLAN
2009-2012

Safety First, Service Always



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Message from the Commissioner

Vision

Through innovation and excellence, a recognized leader in maritime services and safety.

Mission

Canadian Coast Guard services support government priorities and economic prosperity and contribute to the safety, accessibility and security of Canadian waters.

Organizational Values

- *Teamwork*
- *Professionalism*
- *Integrity*
- *Quality service*
- *Innovation*

The 2008-2009 fiscal year proved successful for the Canadian Coast Guard (CCG). As an organization, we continued to make progress in becoming a national institution through program modernization, service level reviews, fleet renewal, and the strengthening of our management and maintenance practices. And most important of all, we continue to deliver quality service on all three coasts 24 hours a day, 7 days a week, due to the efforts of our employees.

In 2008-2009, following several years of experience as a Special Operating Agency, the CCG undertook to refresh its mission, vision and values statements with a view to consolidating its foundation as a truly national institution. I am proud to present the CCG's new vision, mission and organizational values, which were developed after consultation within CCG.

With a new fiscal year before us, we look forward to building on our successes. In the 2009 Budget, released earlier this year, we received $175 million to further our fleet-renewal and vessel-maintenance initiatives, as well as to build our capacity in search and rescue and in environmental response across the country. As this Business Plan illustrates, we continue to focus on three main areas: Client Service, Efficiency and Effectiveness, and People.

This Business Plan sets out what we believe to be realistic and achievable priorities for the next three years. As always, however, we welcome suggestions from clients and our staff on ways to improve our Plan in the future.

George Da Pont
Commissioner
Canadian Coast Guard

Introduction

The Canadian Coast Guard (CCG) developed this comprehensive, integrated Business Plan to set out, in one place, its strategic priorities and operational activities. It is an expanded version of the CCG material in the Report on Plans and Priorities for Fisheries and Oceans Canada (DFO) that is tabled in Parliament every year.

The Business Plan covers a three-year period and is updated annually. A number of the initiatives and commitments described in this Business Plan are responses to reviews and reports. For this reason, we have highlighted with acronyms the commitments related to our 2006 A-Base Review (A-Base), the 2007 Report of the Auditor General (AG), the findings of the Public Service Employee Survey (PSES) conducted in 2005 and DFO's 2007-2009 Sustainable Development Strategy (SDS). There are two progress reports on Business Plan commitments each year: one done at mid-year and one done at the end of the fiscal year. These progress reports are posted on the Coast Guard website and are publicly available.

The Business Plan is divided into five sections:

1. "Who We Are and What We Do" sets out our mandate, our clients, how we are structured and managed, the general results we seek to achieve, and the way our activities link into the work of other government departments.
2. "Where We Are Now" summarizes our operating environment, with attendant impacts and risks.
3. "What We Are Focusing On" sets out our strategic priorities.
4. "What We Do Every Day" describes our operational activities and ongoing services.
5. "Financial Information" sets out how we have allocated the funding provided by Parliament.

In addition, there are a number of annexes, including ones that provide detailed information on our capital plan and the way we are responding to various recommendations from the Auditor General.

Coast Guard History

The first lifeboat and lighthouses in Canada were established on the east coast during the 1700s. In response to an urgent need for protection and regulation of fishing and shipping vessels, patrol vessels appeared along the eastern seaboard and in the Great Lakes region during the 1800s.

At Confederation in 1867, the federal government assumed responsibility for marine affairs including the operation of government vessels and for various elements of marine infrastructure, including:

- Aids to navigation;
- Lifesaving stations;
- Canals and waterways;
- Marine regulatory bodies; and
- Supporting shore infrastructure.

The Department of Marine and Fisheries was established in 1868 to discharge the federal marine mandate. In 1910, the Naval Service of Canada, precursor to the Canadian Navy, was established from a portion of the departmental fleet. Marine and Fisheries became two separate departments in 1930 and, in 1936, responsibility for marine transportation shifted to the new Department of Transport (DOT).

The DOT maintained a fleet of 241 vessels which has subsequently evolved into the CCG fleet. This fleet had a number of missions that now fall under the CCG mandate, including maintaining navigation aids, icebreaking, and Search and Rescue.

Starting in the 1940s, many organizations and communities pressed the government to form a national coast guard. The Canadian Coast Guard (CCG) was officially created on January 26, 1962. The Canadian Coast Guard College was established in 1965 in Cape Breton, Nova Scotia, to train men and women for service in CCG.

The federal government has restructured CCG twice since 1962:

- With the 1995 merger of Coast Guard into Fisheries and Oceans, the DFO Science vessels and the Fisheries Conservation and Protection fleet were incorporated into the Coast Guard Fleet. The merger facilitated better use of resources through multi-tasking vessels and allowed a reduction in the size of the newly combined fleet.
- In 2005, CCG became a Special Operating Agency (SOA) within DFO. SOA status affirmed the Canadian Coast Guard as a national institution and emphasized its essential role providing the maritime services required by users of Canadian waterways. It also confirmed Coast Guard as the operator of the government's civilian fleet in support of programs within DFO and in other government departments. SOA status enables CCG to focus on service delivery and provides the operational and financial flexibilities necessary to do so.

1 WHO WE ARE AND WHAT WE DO

The Canadian Coast Guard (CCG) has a direct and important impact on the lives of Canadians. We help ensure the safe use of Canadian waterways, and we facilitate the smooth functioning of the Canadian economy.

A nationally recognized symbol of safety, Coast Guard serves on three oceans, the St. Lawrence River and Great Lakes, and other major waterways. Often CCG is the only federal presence in many remote, Aboriginal, and Arctic communities. Operating along the longest coastline in the world and in some of its most difficult weather conditions, CCG operates 24 hours a day, every day of the year (for information on what we do every day, please refer to Section 4).

Legal Mandate

Coast Guard's mandate derives from the *Constitution Act, 1867,* which gives the federal government exclusive legislative authority over navigation, shipping, beacons, buoys, lighthouses, and Sable Island.

The *Oceans Act* gives the Minister of Fisheries and Oceans responsibility for services for the safe, economical, and efficient movement of ships in Canadian waters through the provision of aids to navigation, marine communications and traffic management services, icebreaking and ice management services, and channel maintenance.

The *Oceans Act* also gives the Minister responsibility for the marine component of the federal search and rescue program, marine pollution response, and support to other government departments, boards, and agencies through the provision of ships, aircraft, and other services.

The *Canada Shipping Act, 2001* gives the Minister of Fisheries and Oceans responsibilities, powers, and obligations with respect to aids to navigation, Sable Island, St. Paul Island, search and rescue, pollution response, and vessel traffic services.

Under the *Arctic Waters Pollution Prevention Act (AWPPA),* a Ministerial Order may be signed for and issued on behalf of the Governor-in-Council by the Minister of Transport, to provide support and visible written authority for actions taken on their behalf by a designated On-scene Commander of an Arctic spill incident. Subject to regulations under AWPPA and to applicable inter-agency agreements, the Canadian Coast Guard has lead agency responsibility for ensuring responses to ship-source spills, mystery source spills, and ship-source pollution incidents that occur as a result of loading or unloading to or from ships or oil handling facilities in Arctic waters of Canadian interest.

Who We Serve and What We Do

We serve clients in all sectors of the Canadian economy: the general public, commercial shippers, ferry operators, fishers, recreational boaters, coastal communities, and other government departments and agencies. For example:

- We provide services related to aids to navigation, icebreaking, search and rescue, pollution response, and marine communications and traffic management to commercial fishers, commercial shippers, ports, and recreational boaters.
- We respond to federal maritime priorities and natural or man-made emergencies. We provide support for various activities mandated under the Federal Emergency Response Plan and are involved both nationally and internationally in planning and exercises related to environmental response and search and rescue.
- We support DFO programs by providing vessels and maritime professionals to support science activities and to help manage and protect fisheries resources. Internal clients include DFO Fisheries Management, DFO Oceans Management, DFO Science, and DFO Small Craft Harbours.
- We support the non-military activities of other government departments and agencies by providing vessels, aircraft, marine expertise, and other maritime services, including support to maritime security activities. Clients for these services include the Department of National Defence, the Department of Foreign Affairs and International Trade, Environment Canada, Health Canada, Natural Resources Canada, the Natural Sciences and Engineering Research Council of Canada, Public Safety Canada, the Royal Canadian Mounted Police, the Canada Border Services Agency, and Transport Canada.

On an average day, CCG:

- Saves 8 lives;
- Assists 55 people in 19 search and rescue cases;
- Services 60 aids to navigation;
- Handles 1,547 marine radio contacts;
- Manages 2,325 commercial ship movements;
- Escorts 4 commercial vessels through ice;
- Carries out 12 fisheries patrols, supports 8 scientific surveys and 3 hydrographical missions;
- Deals with 3 reported pollution events; and,
- Surveys 5 kilometers of navigation channel bottom

How We Are Structured and Managed

The Canadian Coast Guard is a national agency with headquarters in the National Capital Region and five regional offices (Newfoundland and Labrador, Maritimes, Quebec, Central and Arctic, and Pacific), stretching from coast to coast to coast. CCG is a highly decentralized organization, and the vast majority of its employees are located in the regions.

The Commissioner is the Chief Executive Officer of the Agency, reporting and accountable to the Deputy Minister of Fisheries and Oceans Canada for the performance of the Coast Guard. The Commissioner has the full authority of an Associate Deputy Minister, with the exception of Section 33 of the *Financial Administration Act*, reflecting the intention of the Coast Guard to rely on DFO for comptroller functions. The Coast Guard Deputy Commissioner is the Chief Operating Officer of the Agency, reporting to the Commissioner.

This organization and governance information is shown in Figure 1.

Coast Guard Management Board (MB) is the Agency's senior decision-making body. The Board is chaired by the Commissioner and comprises the Deputy Commissioner, the Directors General, the Assistant Commissioners, and the Executive Directors of the Canadian Coast Guard College and National Labour Force Renewal Directorate. The senior human resources advisor, the senior legal advisor, the senior financial advisor, the senior communications advisor, and the Executive Advisor to the Commissioner are ex officio members of MB. MB is supported by a number of permanent and temporary sub-committees.

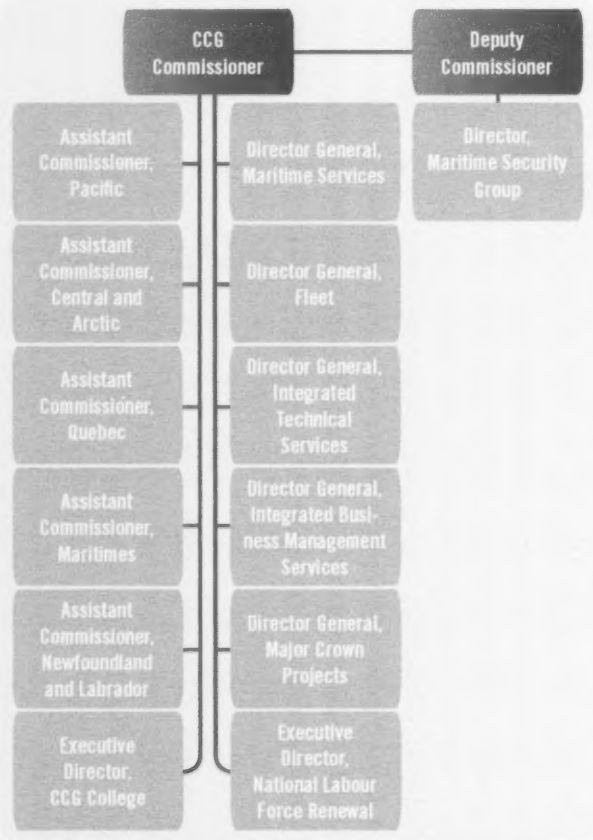
External Advisory Groups

Strategic Advisory Council (SAC) – Chaired by the Deputy Minister of Fisheries and Oceans Canada, SAC comprises Deputy Ministers from departments and agencies that receive support or services from Coast Guard. SAC's role is to provide input to strategic decisions and performance feedback on CCG service delivery.

National Marine Advisory Board (NMAB) and Regional Marine Advisory Boards (RMABs) – the NMAB and its six regional counterparts (RMABs) are the Coast Guard's primary interface with the marine shipping industry. They provide a forum for discussion of shared priorities and objectives as well as the feedback on service delivery that CCG requires as a service provider.

Additionally, at the regional level, CCG consults with a variety of stakeholders, including fishers and recreational boaters, through various local fora such as Local Marine Advisory Councils and fishers advisory groups. CCG also participates in Transport Canada-led national and regional Canadian Marine Advisory Councils and Recreational Boating Advisory Councils.

Figure 1 - CCG Management Structure


CCG Commissioner
Deputy Commissioner
Assistant Commissioner, Pacific
Director General, Maritime Services
Director, Maritime Security Group
Assistant Commissioner, Central and Arctic
Director General, Fleet
Assistant Commissioner, Quebec
Director General, Integrated Technical Services
Assistant Commissioner, Maritimes
Director General, Integrated Business Management Services
Assistant Commissioner, Newfoundland and Labrador
Director General, Major Crown Projects
Executive Director, CCG College
Executive Director, National Labour Force Renewal

Where We Fit:

Coast Guard, Clients and Stakeholders, and the Government of Canada

CCG does not operate alone. We work with many clients and stakeholders within and outside DFO, and our activities support the results those clients and stakeholders are seeking to achieve, as well as certain government-wide objectives. These activities, linkages, and desired results are shown in the figure below.

Coast Guard provides these services:

Aids to Navigation
Waterways Management
Marine Communications and Traffic Services
Icebreaking Services
Search and Rescue
Environmental Response Services
Maritime Security
Coast Guard Fleet Operational Readiness
Lifecycle Asset Management
Canadian Coast Guard College

Canadian Coast Guard

To achieve these results for Canadians...

- Safe, economical and efficient movement of maritime traffic in Canadian waters.
- Minimize loss of life or injury resulting from marine accidents.
- Minimize impacts of ship source spills in Canadian waters.
- Civilian fleet operationally ready to deliver Government of Canada requirements for an operationally ready fleet.

Measured this way...*

- Percentage of traffic accidents versus vessel clearances.
- Confidence in the CCG's ability to deliver SAR services.
- Confidence in the CCG's ability to deliver ER services.
- The extent to which CCG is meeting Government of Canada requirement for an operationally ready fleet.

* NOTE: CCG has committed to consulting clients and stakeholders and adjusting its Performance Measurement Framework, including targets, where required. As a proxy, CCG will assess its performance against the extent to which all sub-activity targets are met.

To help our clients and stakeholders achieve their own results and objectives:

For DFO, its three strategic outcomes:

Safe and Accessible Waterways (directly)
Healthy and Productive Aquatic Ecosystems (indirectly)
Sustainable Fisheries and Aquaculture (indirectly)

For the Government of Canada, these two government-wide outcomes:

Sustainable Economic Growth
Safe and Secure Communities

For other government departments and agencies

Their own results and objectives

(2) WHERE WE ARE NOW

Our risks and challenges have been identified in several sources:

- An environmental scan conducted in late 2008;
- The 2007 Report of the Auditor General;
- Our 2006 A-Base Review; and
- Our 2006 corporate risk profile.

We are reviewing our current corporate risk profile, with a view to updating and finalizing it in 2009. This will involve a rigorous look at the environment in which we operate to identify and assess the risks and challenges that could prevent us from achieving our objectives. We will also look at options for mitigating the risks identified and will incorporate these into future priority-setting and decision-making exercises.

We will respond to this challenge/risk...	With these strategies or key initiatives...	Which are described in detail...
Securing the Next Generation of Human Resources*		
By 2012, approximately 24% of CCG's seagoing staff will be eligible to retire. Similar attrition rates exist for other critical occupations, including Marine Communications and Traffic Services Officers, Electronics Technologists, and Engineers. The continued challenge over the coming years will be to ensure CCG is equipped with a representative workforce in a competitive market for skilled, qualified, and certified mariners and other professionals.	• Recruitment and Diversity	On page 25
	• Canadian Coast Guard College Transformation Initiative	On page 57
Evolving Demand for Coast Guard Services		
Despite the recent global economic downturn, marine traffic is expected to increase in the medium to long term. This traffic, combined with rapid technological advancements in the marine industry and climate-change impacts, including fluctuating water levels and extended shipping seasons, is among the factors expected to place increased demands on Coast Guard Maritime Services programs, including Icebreaking, Search and Rescue, Environmental Response, and Waterways Management. CCG also needs to be in a position to respond to the evolving maritime needs of the Government of Canada. The increasing emphasis on the Arctic, for example, will create both challenges and opportunities for CCG. The challenge facing CCG is to balance the needs, demands, and expectations of Canadians, clients, and stakeholders within available resources.	• Levels of Service Review	On page 13
	• Marine Services Fees Strategy	On page 13
	• e-Navigation	On page 18
	• NAVAREAs	On page 34
	• Post-Panamax Study, St. Lawrence River	On page 32
	• Search and Rescue Needs Analysis	On page 39
	• Health of the Oceans	On page 42
	• Review of the National Environmental Response Strategy	On page 42
Aging Infrastructure*		
The CCG fleet is aging, affecting vessel reliability and the ability to meet program demands. As the vessels age, more breakdowns occur and maintenance costs increase. In the past few federal budgets, the Coast Guard has received $1.4 billion to acquire 17 new large vessels. However, it will take several years to acquire all these vessels, and it will be challenging to sustain the fleet and program activities in the interim. Budget 2009 provided $175 million to acquire 98 small vessels and barges to enhance refits and vessel life extensions on the large vessels, which will help the transition. Despite significant investment since 2003, shore-based infrastructure (e.g., CCG bases, radio towers, and Marine Communications and Traffic Services (MCTS) Centres) continues to deteriorate and will require further substantive investment. The challenge is to maintain service levels in light of the aging infrastructure, as well as respond to rapid technological changes, for example, navigational services moving away from traditional physical aids toward a modern electronic and information-based service.	• Procurement of New and Replacement Vessels	On page 16
	• Aids to Navigation of the 21st Century	On page 18
	• Vessel Maintenance Management Review	On page 20
	• Development of an Integrated Investment Planning Framework and an Integrated Investment Plan	On page 17
	• Improved Maintenance of the Existing Fleet and Improved Maintenance of Existing Shore-based Infrastructure	On page 51

We will respond to this challenge/risk...	With these strategies or key initiatives...	Which are described in detail...
	• Improve National Consistency in Human Resources Management	On page 26
Functioning as a Truly National Institution Both the Auditor General and our own internal A-Base Review indicated that we need greater consistency in the design and delivery of our national program while safeguarding regional operational authority and responsibilities.	• Stronger Canadian Coast Guard Identity	On page 22
	• Vessel Maintenance Management Review	On page 20
	• Consistent Business Management Practices	On page 20
	• Ongoing Improvements in Fleet Management	On page 50
	• Strategic Program Framework for CCG's Maritime Services Programs	On page 22
Managing Key Relationships* CCG relies on the assistance of third parties to address functions critical to the delivery of CCG programs and services, such as corporate services, acquisitions, and procurement. Expediting procurement is a top priority of the federal government, and Coast Guard must work closely with federal departments and central agencies to find simpler and more streamlined processes through which to acquire needed assets and capabilities. The Agency also works with and relies on other federal government departments, agencies, and volunteers, such as the Canadian Coast Guard Auxiliary and a variety of other stakeholders, to deliver its mandate to Canadians. CCG's challenge in this regard is to proactively manage these relationships.	• Service Level Agreements with DFO Clients	On page 13
	• Review of the Working Relationship with DFO's Human Resources and Corporate Services	On page 20
Managing Information* A number of reports, reviews, and exercises have highlighted the need for us to improve our ability to produce, access, apply, and manage the information needed for critical business and operational decision-making and performance measurement. Such information is critical to support for day-to-day operations, as well as to strategic decision-making.	• CCG Performance Measurement Framework	On page 21
	• Salary Management Information System	On page 20
	• Ongoing improvements in fleet management – Fleet Activity Information System	On page 50
Maritime Security Since September 2001, CCG has been a core partner in Canada's multi-agency approach to maritime security. CCG has a broad mandate to provide support to other government departments, and the Government and Canadians expect that CCG will be ready and able to respond in support of other departments' security mandates. As a result, CCG has received dedicated national security funding to deliver specific maritime security activities. Due to the lack of explicit security mandate, growing expectations, and dedicated funding provided to the CCG, it is important to clearly articulate CCG's role and contributions in support of maritime security.	• CCG Maritime Security Framework	On page 15
	• Marine Security Enforcement Team	On page 45
	• Marine Security Operations Centres	On page 46
	• Automatic Identification System (AIS)/Long Range Identification and Tracking System (LRIT)	On page 46

** identified as a key risk in the CCG Corporate Risk Profile 2006*

(3) WHAT WE ARE FOCUSING ON

Coast Guard has six priorities, and each priority is associated with one or more strategies. All of these strategies are discussed in detail in this section, and all are grouped in terms of CCG's three focus areas: Focus on Client Service, Focus on Efficiency and Effectiveness, and Focus on People.

In addition to the priorities discussed in this section, CCG manages a wide range of day-to-day operations. For detailed information on these activities, see Section 4.

Focus on Client Service

Priority 1: Improving Client Services

Levels of Service Review
Marine Services Fees Strategy
Service Level Agreements with DFO Clients

Priority 2: Supporting Government of Canada Priorities

Support of the Government's Northern Strategy
Development of the CCG Maritime Security Framework
Environmental Management Framework

Focus on Efficiency and Effectiveness

Priority 3: Renewing the Fleet and Shore-based Assets

Procurement of New and Replacement Vessels
Accelerated Vessel Procurement and Repair
Integrated Investment Plan

Priority 4: Modernization through Innovation and Technology

Aids to Navigation of the 21st Century
e-Navigation
Upgrade Vessel Traffic Information Systems
Research and Development Strategy

Priority 5: Strengthening Management

Vessel Maintenance Management Review
Consistent Business Management Practices
Strategic Program Framework for CCG's Maritime Services Programs
Stronger Canadian Coast Guard Identity

Focus on People

Priority 6: Effective Management of Our Workforce and Workplace

Recruitment and Diversity
Training and Learning
Improve National Consistency in Human Resources Management

Priority 1: Improving Client Service

Since becoming a Special Operating Agency (SOA) in 2005, Coast Guard has taken a more structured approach to consulting with industry, at both a national and regional level, through its marine advisory boards and with other government departments and agencies through a Deputy Minister level advisory council.

Levels of Service Review

The Canadian Coast Guard ensures the quality of the services provided to clients by being committed to meeting published levels of service and by having defined service standards and performance measures associated with its operations.

The 2007 Report of the Auditor General and the internal 2006 A-Base Review noted that progress in achieving up-to-date national policies, standards, and levels of service had been slow. Both reports noted that existing Levels of Service (LOS) were being interpreted inconsistently throughout Coast Guard and that their application varied from region to region.

In response to these concerns, the Canadian Coast Guard launched the current Levels of Service review. During the fall of 2007, CCG conducted over 30-client engagement sessions on CCG Levels of Service. Outcomes of the Levels of Service review will be reported to clients in 2009-2010, and CCG will reissue its Levels of Service and Service Standards document to reflect the input received and to improve service standards. Adjustments will be implemented based on available resources.

In addition, we will develop a process for ongoing engagement with clients on CCG Levels of Service. Each of the six programs in CCG will establish a plan to engage its clients periodically, providing input and guidance to their Levels of Service.

Commitment		Lead
2009-2010		
Reissue *Levels of Service and Service Standards* document.	AG A-Base	Director General, Maritime Services (DG, MS)
Develop and implement an ongoing Levels of Service engagement strategy, by program.		DG, MS

Marine Services Fees Strategy

The Coast Guard has worked closely with the commercial shipping industry to re-examine Marine Services Fees. One outcome of that work was the announcement of a three-year moratorium on Arctic fees. A joint CCG — Industry working group has analyzed the fees and developed options for consideration. It is anticipated that a decision on a future direction will be taken in 2009-2010.

2008-2009 Accomplishments

Levels of Service Review

- Clients continued to be engaged in the review process. Client feedback and the Levels of Service and Service Standards document were posted to the Canadian Coast Guard website.

Marine Services Fees Strategy

- Developed options for the future of the Marine Services Fees.

Service Level Agreements

- Established Service Level Agreements with Fisheries and Oceans Canada clients.

Service Level Agreements with DFO Clients

In 2008-2009, the Canadian Coast Guard developed Service Level Agreements (SLAs) with DFO Science and Fisheries and Aquaculture Management – Conservation and Protection. The next stage will be to implement these SLAs as a pilot project and to develop, test, and modify effective performance measures. CCG already maintains formal service agreements with clients external to the Department (see page 7 for more information on our clients and the services provided).

Commitment		Lead
2009-2010		
Implement Service Level Agreements with Science and Fisheries and Aquaculture Management as a 3 year pilot, and review and improve performance measures.	A-Base AG	DG, Fleet
2011-2012		
Finalize Service Level Agreements for use on an ongoing basis based on the outcome of the pilot.	A-Base AG	DG, Fleet

Priority 2: Supporting Government of Canada Priorities

As the owner and operator of Canada's civilian maritime fleet, the Canadian Coast Guard is often called upon to provide technical and operational services and advice in support of Government of Canada priorities.

2008-2009 Accomplishments

The Northern Strategy

- Completed a Mission Profile to advance design and acquisition planning for a new polar icebreaker.
- Notified the International Maritime Organization (IMO) of Canada's intention to begin satellite broadcast service in two Arctic Navigational Areas on January 1, 2010.

Tackling Climate Change and Preserving Canada's Environment

- Developed a training course for senior managers to help ensure effective response to marine pollution incidents.
- Developed a Pollution Response Officer training course for Environmental Response personnel pursuant to the *Canada Shipping Act, 2001* (Part VIII).

Maritime Security

- On behalf of the International Maritime Organization, led the development of the international Long Range Identification and Tracking (LRIT) System.
- Fully implemented the land-based Automatic Identification System, including 19 Marine Communications and Traffic Services Centres and 110 remote sites.
- Delivered the planned interim Marine Security Enforcement Team program for four vessels on the Great Lakes St. Lawrence Seaway System. A contract is in place to ensure Law Enforcement Familiarization Training is provided.
- Participated in the joint Operation NANOOK 2008, led by the Department of National Defence.

Support of the Government's Northern Strategy

CCG has a long and proud history of providing service in the Arctic and to Northern Canadians. Every year, from late June to early November, Coast Guard deploys one light, two heavy, and three medium icebreakers to the Arctic. In addition to the officers and crew that operate these icebreakers, close to 70 other CCG employees are assigned to Northern operations on a seasonal basis.

This presence of Coast Guard personnel and assets in Canada's North helps to protect and secure Canada's Arctic sovereignty, advance the government's Northern Strategy, and keep Arctic waterways open, safe, and clean.

Budget 2007 provided the Coast Guard with $2.2 million in funding over three years to enhance Canada's capacity to respond to marine oil spills that occur in the Arctic. In 2009-10, Coast Guard will complete the distribution of environmental response equipment packages in the North.

Also in 2007, the International Maritime Organization (IMO) confirmed Canada in its role as international coordinator and issuing service for navigational warnings for two Navigational Areas (NAVAREAs) in the Arctic. NAVAREAS are established geographical areas within which to coordinate the broadcast of navigational warnings to mariners and communities. Coast Guard plans to begin delivering this service in 2010 (see page 34).

In 2008, the government took the decision to replace Coast Guard's most capable Arctic icebreaker, CCGS *Louis S. St-Laurent*, built in 1969, and to decommission it in 2017. Budget 2008 provided $720 million for the procurement of a new polar-class icebreaker, which is being designed with greater icebreaking capabilities than the one it is replacing, allowing it to operate for longer periods in the Arctic. This new vessel will allow the Coast Guard to more efficiently continue its work to strengthen and protect Canada's sovereignty in the Arctic.

Our Arctic activities, many of which are delivered in partnership with others, include:

- Escorting commercial ships through ice to ensure access to Northern communities;
- Supporting scientific endeavours such as hydrographic charting and marine science;
- Maintaining some aids to navigation in Canadian Arctic waterways;
- Acting as the primary response lead for pollution incidents north of 60;
- Providing marine search and rescue services;
- Operating two seasonal Arctic Marine Communications and Traffic Services Centres: Inuvik in the west and Iqaluit in the east;
- Broadcasting weather information and navigational warnings;
- Delivering food, cargo, and fuel to remote sites where commercial ships do not go;
- Conducting joint exercises with the Department of National Defence (Operation NANOOK 2008, for example); and
- Developing an improved awareness of the Arctic maritime domain through vessel identification and tracking security initiatives.

Development of the CCG Maritime Security Framework

CCG delivers essential support services to the federal intelligence and enforcement communities through the provision of vessel traffic data, an operationally ready fleet and infrastructure, and maritime expertise. The Coast Guard is taking steps to make its support of maritime security more systematic and more clearly understood. A CCG Maritime Security Framework will be finalized in 2009-2010 that will guide the development and improvement of ongoing CCG support to the security and intelligence community.

The Maritime Security Framework presents a series of considerations related to the CCG contribution to Canada's national security. It is intended to offer context and provide parameters around the ongoing CCG cultural change. Additionally, background information is offered to provide an understanding of the position of the Coast Guard contribution within the collective federal effort to enhance Canada's national security.

Commitment	Lead
2009-2010	
Finalize the CCG Maritime Security Framework.	Deputy Commissioner

Environmental Management Framework

A responsible approach to preserving a healthy environment and addressing the challenge of climate change is needed to sustain Canada's economic prosperity. CCG is seriously committed to the environment. In 2009-2010, the Coast Guard will develop an Environmental Management Framework for internal operations that will establish the principles and considerations necessary to begin addressing requirements for reducing air emissions (including greenhouse gas), as well as other greening of government initiatives.

As part of DFO's 2007-2009 Sustainable Development Strategy (SDS), Coast Guard made specific, voluntary commitments to improve environmental outcomes for Canadians by reducing its own environmental footprint and developing a health, safety and environmental management system. Coast Guard will defer the development of environmental and sustainability standards and specifications, previously scheduled for completion in 2009-2010 as part of the SDS, to 2011-2012 to allow it to first develop an Environmental Management Framework.

Commitment		Lead
2009-2010		
Put in place an Environmental Management Framework to establish the principles and considerations necessary to begin addressing greening of government priorities, including reductions in greenhouse gas emissions.		Director General, Integrated Technical Services (DG, ITS)
2010-2011		
Under the Departmental Occupational Health and Safety Program, complete development of the CCG component which is a comprehensive management system for health, safety, and environmental issues specific to all shore equipment, facilities and operations.	SDS	DG, ITS Deputy Commissioner, CCG
2011-2012		
Develop a set of industry-leading, environmental and sustainability standards and specifications that incorporate modern environmental practices and technology, as well as national and international best practices, into the procurement of new CCG assets. Coast Guard to take the lead in 'green' acquisitions and operations of both marine and shore-side infrastructure through the use of standards and specifications.	SDS	DG, ITS with the support of the DG, Major Crown Projects (MCP)
Leverage the experience and knowledge of CCG and other organizations to conduct a baseline survey of the physical assets and operations of CCG to establish a benchmark of their environmental sustainability and eco-efficiency.	SDS	DG, ITS

Priority 3: Renewing the Fleet and Shore-based Assets

Our 25-year Fleet Renewal Plan provides a solid foundation for building the Government of Canada's civilian fleet of the future. This Plan takes into account evolving government priorities and service demands and allows for flexibility in responding to clients' needs in a complex and changing environment.

2008-2009 Accomplishment

Procurement of New Vessels

- Delivered a new Air Cushion Vehicle (ACV) to the Quebec Region.

In addition to renewing the fleet, CCG is seeking to improve the planning processes for all asset investment needs by developing an Integrated Investment Plan. The objectives are to further integrate decision-making and to improve stewardship and value for money.

Procurement of New and Replacement Vessels

CCG has been funded in recent budgets to acquire 17 new vessels at a cost of $1.4 billion: 12 Mid-shore Patrol Vessels (MSPVs), 3 Offshore Fishery Science Vessels (OFSVs); 1 Offshore Oceanographic Science Vessel (OOSV), and 1 Polar Icebreaker. Twelve of these 17 vessels replace vessels that are at or near the end of their useful lives; 4 Mid-shore Patrol Vessels are additions to the fleet to support enhanced maritime security activities on the Great Lakes and St. Lawrence River, and 1 Mid-shore Patrol Vessel will support fisheries enforcement on the East Coast.

There have been difficulties with the MSPV procurement. A Request for Proposal (RFP) for 12 Mid-Shore Patrol Vessels was cancelled in August 2008 because bid prices exceeded available funding. Another RFP was issued in March 2009, with the objective of optimizing the number of vessels delivered to CCG within the allocated budget without compromising vessel performance. The contract for the supply of MSPVs is targeted to be awarded in late 2009. The target date for delivery of the first MSPV is 2011.

In light of the cancellation of the MSPV RFP, the project profile, solicitation strategy and schedule for the Offshore Fisheries Science Vessels (OFSV) had to be re-assessed. The competitive process to acquire three OFSV's is now targeted to be conducted in 2010-2011.

In 2009-2010, we will carry out the detailed design activities for the Offshore Oceanographic Science Vessel and the competitive process for the acquisition is targeted to be conducted in 2010-2011.

With regards to the Polar Icebreaker project, the objective is to secure Preliminary Project Approval and conduct the project definition phase to validate requirements and carry out conceptual design activities. The Polar Icebreaker is scheduled for delivery in 2017 and will enter full Arctic service in 2018.

Commitment		Lead
Mid-Shore Patrol Vessels		
2009-2010		
Award contract to build up to 12 Mid-Shore Patrol Vessels.	AG A-Base	DG, MCP
2011-2012		
Deliver the first Mid-Shore Patrol Vessel.	AG A-Base	DG, MCP
Offshore Fishery Science Vessels		
2009-2010		
Launch detailed design activities for Offshore Fishery Science Vessels.	AG A-Base	DG, MCP
2010-2011		
Issue competitive RFP to build three Offshore Fishery Science Vessels.	AG A-Base	DG, MCP
Award contract to build three Offshore Fishery Science Vessels.	AG A-Base	DG, MCP
Offshore Oceanographic Science Vessel		
2009-2010		
Launch detailed design activities for the Offshore Oceanographic Science Vessel.	AG A-Base	DG, MCP
2010-2011		
Issue competitive RFP to build the Offshore Oceanographic Science Vessel.	AG A-Base	DG, MCP
Award contract to build the Offshore Oceanographic Science Vessel.	AG A-Base	DG, MCP
Polar Icebreaker project		
2009-2010		
Finalize Polar Icebreaker Preliminary Project Approval document for submission to Treasury Board.	AG A-Base	DG, MCP
2010-2011		
Finalize Polar Icebreaker technical requirements and design guidance package.	AG A-Base	DG, MCP
2011-2012		
Award Polar Icebreaker design contract.	AG A-Base	DG, MCP

Accelerated Vessel Procurement and Repair

As part of the Government of Canada's Economic Action Plan, the 2009 budget provides additional funding of $175 million for the purchase of 98 small craft (including 30 replacement Environmental Response barges), a number of new vessels including 5 new 47' Search and Rescue Motor Lifeboats, 3 inshore Science vessels (to replace existing vessels), as well as funds to conduct 5 vessel life extensions and conduct previously planned but un-funded refit activities for the remaining 35 large vessels. These investments will enhance fleet renewal and vessel maintenance initiatives and will strengthen our overall capacity, particularly in Search and Rescue and in Environmental Response across the country.

Commitment	Lead
47' SAR Motor Lifeboats	
2009-2010	
Award Contract to build 5 47 ft SAR Motor Lifeboats.	DG, MCP
2010-2011	
Acceptance and delivery of the 5 47 ft SAR Motor Lifeboats.	DG, MCP
Vessel Life Extensions	
2009-2010	
Award contract and complete Vessel Life Extension for: • CCGS *Limnos* • CCGS *Tracy* • CCGS *Bartlett*	DG, ITS
2010-2011	
Award contract and complete Vessel Life Extension for: • CCGS *Cape Roger* • CCGS *Tanu*	DG, ITS
Near-shore Science Vessel Replacements	
2009-2010	
Award the contract to build two 18m Science Vessels.	DG, ITS
Award the contract to build a 24m Science Vessel.	DG, ITS
2010-2011	
Acceptance and delivery of two 18m Science Vessels.	DG, ITS
Acceptance and delivery of a 24m Science Vessel.	DG, ITS
Stimulus Capital Refit Projects	
2009-2010	
Plan and complete $19M of additional vessel refits.	DG, ITS
2010-2011	
Plan and complete $19M of additional vessel refits.	DG, ITS
Replacement Environmental Response Barges	
2009-2010	
Award the contract to build 30 replacement Environmental Response Barges.	DG, ITS
2010-2011	
Acceptance and delivery of 30 replacement Environmental Response Barges.	DG, ITS
Small Craft Acquisition Program (SCAP)	
2009-2010	
Purchase and acceptance of 30 small craft.	DG, ITS
2010-2011	
Purchase and acceptance of 30 small craft.	DG, ITS

Integrated Investment Plan

In 2009-2010, Coast Guard will develop an Integrated Investment Plan under the new Treasury Board Secretariat Policy on Investment Planning – Assets and Acquired Services. We will use this opportunity to better integrate the planning for our investment needs both across CCG and with other sectors of DFO.

This important document will inform government decision-making on resource allocation by linking Agency strategy with investments in assets and acquired services. The Plan will also ensure that decisions are affordable, productive, and financially sustainable while balancing risk, benefits, and return for Canada.

Commitment	Lead
2009-2010	
Develop an Integrated Investment Planning Framework and Integrated Investment Plan.	DG, Integrated Business Management Services (IBMS)

Priority 4: Modernization through Innovation and Technology

It will always be a CCG priority to investigate and implement new ways of doing business that allow us to realize greater efficiencies and bolster our results for Canadians.

Aids to Navigation of the 21st Century

Launched in 2006-2007, the Aids to Navigation of the 21st Century (AToN21) initiative reaffirmed our commitment to innovation and continuous improvement, while maintaining our strong tradition of service and safety. We made real progress on this front; in addition to our 2008-2009 accomplishments, we have reduced the number of hard-copy Notices to Mariners by 33% since last year and finalized a report evaluating CCG's experience in contracting out aids to navigation. As part of the review of the aids to navigation systems, program personnel will continue to ensure that mariners' needs are met, in light of the new technology and today's navigation. At the same time, they will continue to look for the best delivery options.

2008-2009 Accomplishments

Aids to Navigation of the 21st Century

- Completed the modernization of five additional aids to navigation directives.
- Developed National maintenance standards for fixed and floating aids.

e-Navigation

- Initiated engagement with the shipping industry on CCG's vision, strategy, and next steps on e-Navigation.

On the technical and equipment side, the introduction of plastic buoys and light emitting-diode (LED) lanterns is complete. The four-season lighted buoys tested in the Quebec Region on the St. Lawrence continue to show good potential. This four-season technology will continue to be investigated and, once completed, will be shared with all regions for implementation where it makes sense and where it will meet mariners' needs.

The implementation of lifecycle management, national specifications, and standards has progressed significantly within the technical services community. It is now standard practice within CCG to consider new technologies in support of aids to navigation.

In 2009-2010, a project close-out report will be completed, highlighting successes of the AToN21 project and discussing the challenges encountered. Many of the project initiatives have now moved into daily operations in the Aids to Navigation (ATN) program and have set the stage for continuous improvement in ATN programming. Some initiatives (such as adjustment to Loran-C) cannot be completed as initially envisaged because of developments external to CCG and will need to be reconsidered. Finally, some initiatives, such as e-Navigation, have matured to the point where they require dedicated work outside the AToN21 project context.

Commitment		Lead
2009-2010		
Complete the modernization of three additional aids to navigation directives.	AG	DG, MS
Produce an AToN21 project close-out report.	AG	DG, MS
2010-2011		
Complete the modernization of the six remaining aids to navigation directives.	AG	DG, MS

e-Navigation

In 2008-2009, we initiated work in response to increased demands for e-Navigation services. e-Navigation is not a new type of equipment, but a concept that involves a broad range of navigation systems and services. Technological advances, coupled with the success of pilot projects, clearly demonstrate the potential and the need for this service.

What is e-Navigation?

As defined by the International Maritime Organization (IMO), e-Navigation is:

The harmonised collection, integration, exchange and presentation of maritime information onboard and ashore by electronic means to enhance berth-to-berth navigation and related services, for safety and security at sea and protection of the marine environment.

Implementing e-Navigation in a coordinated and organized manner in Canada could significantly enhance safety, have positive economic effects, and increase environmental protection. If current technological advances occur without proper planning, there is a risk that marine navigation systems of the future could be hampered by a lack of standardization (ashore and ship-borne), incompatibility between vessels, and an unnecessary level of complexity.

As the agency responsible for the delivery of maritime services, we are well positioned to play a leadership role for Canada. Integral to the success of e-Navigation will be the ability to meet client demands, modernize

our services, and adapt our business to the new reality of better informed mariners.

CCG has completed a draft vision and strategy for e-Navigation based on our participation in the e-Navigation committee of the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA), the IMO e-Navigation implementation strategy, and a national workshop in June 2008 attended by international experts, all regions, CCG College, Transport Canada, and the Canadian Hydrographic Service (CHS). The content of this vision and strategy document was presented to clients and stakeholders at the national Canadian Marine Advisory Council (CMAC) in November 2008 and discussed during a workshop on e-Navigation, organized by the Shipping Federation of Canada in February 2009.

In 2009-2010, we will work with our partners to develop the mariners' requirements and, based on lessons learned, we will consolidate our operational preparedness. This will allow CCG to set the stage so that its operations adjust to naturally feed the e-Navigation information requirements. In the meantime, we will continue work on the pilot project we have underway in Quebec (see Annex B for R&D initiatives) and on implementation of Automatic Identification System (AIS) (see page 46).

Commitment		Lead
2009-2010		
Identify mariners' requirements for e-Navigation	AG	DG, MS
Begin to develop an implementation strategy.		DG, MS
2010-2011		
Finalize implementation strategy.	AG	DG, MS

Upgrade Vessel Traffic Information Systems

Coast Guard currently operates two separate systems in Canada for vessel traffic management. The two systems are the Vessel Traffic Operator Support System (VTOSS) on the West Coast and the Information System on Marine Navigation (INNAV) for the rest of Canada. In 2009-2010, INNAV will be upgraded to provide a crucial interface with the AIS and will incorporate the operating functionalities required for vessel traffic regulation on the West Coast. This will allow VTOSS to be decommissioned in 2010-2011, leaving CCG with one national system for vessel traffic management.

Commitment	Lead
2009-2010	
Commission Vessel Traffic Management Information System (VTMIS)-Information System on Marine Navigation (INNAV) on Windows XP platform including AIS functionalities for East Coast MCTS Centres.	DG, ITS
Interface VTMIS-INNAV with Long Range Identification and Tracking System.	DG, ITS
Install VTMIS-INNAV technical training platform at the CCG College (for training of ITS technical support personnel)	DG, ITS
Upgrade VTMIS-INNAV to include AIS interface and required functionalities for West Coast vessel traffic regulation.	DG, ITS
2010-2011	
Complete operational training on upgraded VTMIS-INNAV on West Coast.	DG, ITS/ DG, MS
Commission VTMIS-INNAV on West Coast and decommission Vessel Traffic Operator Support System and dispose of old equipment.	DG, ITS DG, MS

Research and Development Strategy

The Canadian Coast Guard's Research and Development (R&D) program is designed to secure innovation investment that will allow CCG to fulfil its mandate more effectively. Coast Guard has always had some investments in R&D.

CCG often draws upon the resources and expertise of other federal agencies such as the Transportation Development Centre (TDC) and the National Research Council (NRC); cooperative funding may also be sought from the Search and Rescue New Initiatives Fund (NIF), the Program of Energy, Research and Development (PERD), and other special funds (For details on CCG ongoing R&D projects see Annex B).

In 2009-2010, Coast Guard will focus on developing an integrated R&D strategy that emphasizes innovation. This will complement our new mission statement and help bring the CCG from a traditionalist/reactionary mini-R&D organization to one whereby its culture, management, and processes are established to foster innovation and the creation of new knowledge. The R&D strategy is expected to lay the groundwork for enhanced framework conditions for research and innovation and the adapting of specific policies and supporting instruments to the changing nature of innovation.

Commitment	Lead
2009-2010	
Begin to develop a Research and Development strategy for CCG.	DG, MS

Priority 5: Strengthening Management

The 2007 Report of the Auditor General was critical of various aspects of CCG's management practices. The Auditor General (AG) noted that CCG did not operate as a national institution, but rather as "five Coast Guards." Both the AG and CCG's own internal A-Base review showed that we had inconsistent practices across the country in many aspects of our business. CCG's efforts to strengthen management will enhance national leadership and consistency, the effectiveness and efficiency of our operations, and will ensure that CCG is truly a national institution.

Vessel Maintenance Management Review

The Vessel Maintenance Management Review (VMMR) project was established as a key deliverable in response to findings in the February 2007 Report of the Auditor General.

2008-2009 Accomplishments

Vessel Maintenance Management Review

- Established the requirements for minimum complements for vessels in maintenance periods and developed a business case for increasing engineering personnel to respond to the increasing maintenance requirements of certain vessels.
- Clarified roles in the CCG Authority and Accountability Directive for Vessel Maintenance Management.
- Created an accessible bank of maintenance policies and procedures and published them on the CCG Intranet.

In 2008-2009, Coast Guard developed an action plan and started to address the concerns raised in CCG's VMMR Report. Progress was made in clarifying and documenting the roles, responsibilities, and accountabilities for vessel maintenance management and in making current maintenance policies and procedures more accessible to CCG personnel.

In 2009-2010, CCG will work to increase the number of marine engineers ashore and onboard vessels, establish a Centre of Expertise for Vessel Maintenance Management, and provide other support to vessel maintenance management. Furthermore, CCG will begin to develop and implement a program management framework for vessel maintenance, including a model of policy governance for vessel maintenance management, a lexicon, and a procedures manual.

Commitment		Lead
2009-2010		
Implement the CCG Vessel Maintenance Management Policy Governance (CCG Authority and Accountability Directive for Vessel Maintenance Management).	AG	DG, ITS
Finalize CCG vessel condition assessment for all CCG vessels, and develop a Vessel Continuous Condition Survey Program.	AG	DG, ITS
Begin to establish a Centre of Expertise for Vessel Maintenance Management and prepare to add 69 positions over 3 years to directly support CCG regions and vessels.		DG, ITS
2010-2011		
Fully operationalize the Centre of Expertise for Vessel Maintenance Management.		DG, ITS

Consistent Business Management Practices

Salary Management Information System

Our 2006 A-Base review identified the need to develop common data-entry practices for our Salary Management Information System (SMIS). Full implementation of common SMIS procedures will take place in 2009-2010.

2008-2009 Accomplishments

Salary Management Information System

- Defined a set of Salary Management Information System best practices and developed a procedures manual to ensure that they are consistently applied. Initiated training of the appropriate staff in preparation for full implementation in 2009-2010.

Commitment		Lead
2009-2010		
Put into practice the common Salary Management Information System procedures.	AG A-Base	DGs and ACs

Review of the Working Relationship with DFO's Human Resources and Corporate Services

The A-Base Review also recommended that we assess our relationship with DFO's Human Resources and Corporate Services[1] (HRCS) to ensure that consistent levels of support are provided to CCG across the regions. In 2007-2008, we worked closely with HRCS to identify

1 DFO Human Resources and Corporate Services (formerly referred to as HRCS) has been restructured into three separate organizations reporting to the Deputy Minister: Human Resources, Chief Financial Officer, and the Assistant Deputy Minister of Infrastructure and Information Management.

both the service levels provided to the Agency in each CCG region and best practices in this regard. In 2008-2009, we developed a broad list of recommendations to improve the working relationship and service delivery between CCG and HRCS. We also developed a new Service Level Agreement (SLA) that describes services provided to CCG and performance measures. This multi-year document will evolve as HRCS standardizes its organization and Levels of Service nationally. In 2009-2010, we will focus on promoting the consistent application of business practices in the key areas identified in the review of the CCG-HRCS working relationship. These include practices related to the Duty to Accommodate and Return to Work protocols, as well as those related to warehousing and the maintenance of CCG's Category II real property sites where custodianship lies with HRCS.

Commitment		Lead
2009-2010		
Implement a new Service Level Agreement while continuing to improve the Agreement in consultation with the Human Resources and Corporate Services Sector.	A-Base	Assistant Commissioner, Newfoundland and Labrador (AC, NL) HRCS
Develop national common practices regarding the Duty to Accommodate and Return to Work protocols.		AC, NL HRCS
Review existing regional warehousing arrangements and requirements, and develop a service delivery model that aligns with the CCG/HRCS Service Level Agreement.		Assistant Commissioner, Central and Arctic (AC, C&A) HRCS
Complete a national review of issues related to the maintenance of Category II real property sites, and propose options for addressing the long-term capital needs of the Real Property, Safety and Security Branch.		AC, Maritimes HRCS
2010 – 2011		
Monitor and report on the new Service Level Agreement.		DG, IBMS
Implement common practices for the Duty To Accommodate and Return to Work protocols.		AC, NL HRCS

Stand-by Arrangements

Employees in designated groups, primarily those of an operational and technical nature, are required to be available on stand-by during off-duty hours to return to duty as quickly as possible, if called. For example, the provision of stand-by pay is specified in the respective collective agreements, but the application of these provisions varies across regions as does the service response capacity. A review will be conducted to determine how stand-by arrangements are currently administered in each region and options will be identified to standardize the application of this practice.

Commitment	Lead
2009-2010	
Conduct a review of regional stand-by arrangement policies currently in force in all directorates and develop a strategy for consistent utilization across functions and regions.	AC, C&A

Communication Protocols

A need has been identified to improve communications processes and protocols across CCG to provide senior management with the information required to support expeditious and informed decisions related to emergency situations. A working group will be established to review the processes currently in place in CCG regions, at headquarters, and with interdepartmental Emergency Preparedness partners with a view to providing recommendations for improvement.

Commitment		Lead
2009-2010		
Review CCG communications protocols related to emergency situations and provide recommendations for improvements.	A-Base	AC, Quebec

CCG Performance Measurement Framework

In 2008-2009, the Canadian Coast Guard launched a web-based questionnaire to provide stakeholders with the opportunity to comment on its Performance Measurement Framework (PMF). The objective of this consultation is to assist us in identifying what performance measures would be relevant and meaningful to our clients and stakeholders.

Commitment		Lead
2009-2010		
Analyze input from the web-based questionnaire on CCG performance measures.	AG	DGs

Strategic Program Framework for CCG's Maritime Services Programs

To strengthen the effectiveness and efficiency of Maritime Services programs, we have developed a Strategic Program Framework that is based on the widely accepted federal program management principles outlined in the Government of Canada Management Accountability Framework (MAF) (see Annex D). The Framework is our central focus for systematically structuring and reviewing Maritime Services programs from a strategic perspective on an ongoing basis.

Using the Framework, we began in 2008-2009 a systematic examination of Coast Guard programs. As each program is reviewed, tailored plans are developed to ensure that program management is strengthened and our efforts are concentrated on priority areas. This systematic examination will be completed for all Maritime Services programs in 2009-2010. We will also engage key partners of the programs to reaffirm our common understanding of our respective needs, capacities, roles, responsibilities, and accountabilities in meeting the objectives of the Government of Canada. Finally, we will examine performance measurement systems for Maritime Services and seek to improve them.

Beginning in 2009-2010, with the results of the systematic examination of our programs in hand, we will analyze the operations of Maritime Services programs region by region, examining procedures and services to ensure that they are delivered nationally on a consistent basis.

Commitment	Lead
2009-2010	
Complete a systematic examination of all Maritime Services programs, using the Strategic Program Framework and develop a plan for each program.	DG, MS
Engage Maritime Services key partners to clarify needs, capacities, roles, responsibilities, and accountabilities.	DG, MS
2010-2011	
Analyze the operations of Maritime Services programs region by region, and ensure that procedures and services are delivered nationally on a consistent basis.	DG, MS

Stronger Canadian Coast Guard Identity

The Canadian Coast Guard continuously seeks opportunities to strengthen its identity and celebrate the traditions, values, and culture that make the Agency a proud national institution.

In that context, 2012 will mark the 50th anniversary of the Coast Guard. To celebrate this important milestone, the Agency will develop a comprehensive communications strategy in 2010-2011 to ensure the broadest national participation in our silver jubilee. Hopes are also high that a proposal submitted over a year ago to the Royal Canadian Mint to strike a commemorative 50th anniversary Coast Guard coin in 2012 will prove successful.

Commitment	Lead
2010-2011	
Develop a communications strategy and requisite products to help celebrate Coast Guard's 50th anniversary in 2012.	DG, IBMS

The Canadian Coast Guard has been working on increasing its visibility and identity through a stronger national web presence. During 2008-2009, CCG continued the transition to a national web presence, by complying with the government's common look and feel standards for websites and by implementing a high-level architecture to seamlessly organize the functional and regional sites. In addition, a web governance model, publishing processes, and a sustainability plan were developed to ensure a viable and enduring web presence for CCG.

In 2009-2010, we will implement the web governance model, publishing processes, and sustainability plan. The continuation of the transition to a national website will also include the conversion of dynamic pages to Common Look and Feel 2.0 (CLF 2.0) standards where appropriate.

Commitment	Lead
2009-2010	
Implement the web governance model and publishing processes which will be the first step towards creating a sustainable internet presence for CCG.	DG, IBMS

The Coast Guard uniform is an important symbol of our identity. In 2007-2008, we developed guidelines to ensure that the uniform is worn appropriately and in a consistent fashion. In 2008-2009, we worked with staff and bargaining agents to promote awareness and a common understanding of these guidelines. In 2009-2010, we will conduct staff consultations regarding next steps.

Commitment	Lead
2009-2010 Conduct a review of applying the CCG uniform wear to the Marine Communications and Traffic Services and Environmental Response program groups. Bring forward findings and recommendations to Senior Management for decision.	AC, NL

Commissioner's Commendation Awarded to Keith Cuddihy

Keith Cuddihy dedicated over 25 years to the Canadian Coast Guard with distinction, and embodies the values of the Coast Guard and the characteristics of a public servant of the highest calibre. As a leader and a steadfast and trustworthy member of the organization, Keith conveyed corporate memory through a great many Commissioners and numerous organizational changes. His service was always marked by a powerful ability to cultivate positive relationships and to communicate effectively with everyone.

Keith earned the respect of superiors and co-workers alike by consistently remaining objective, honest, and thoughtful, by providing advice and guidance with the bigger picture in mind, and by recognizing issues before they arose, using common sense and perception.

Not surprisingly, when he announced his retirement in 2008, colleagues across the Agency noted the tremendous loss that his departure would mark for the organization.

Priority 6: Effective Management of Our Workforce and Workplace

Priority 6 is an executive summary of the *Canadian Coast Guard Strategic Human Resources Plan 2009-2012* (http://www.ccg-gcc.gc.ca/eng/CCG/e0005589). The Plan will help us improve our service to Canada and Canadians by better integrating our human resources management with business planning. The plan will help us navigate unprecedented rates of retirement, tight labour markets and fiscal restraint, while ensuring we have the staff we need to meet our evolving requirements.

CCG relies on a diverse, professional, and dedicated workforce to provide important maritime programs and services, ensuring safe and accessible waterways for all Canadians.

CCG has a total workforce of 4,459 employees across five regions, at the CCG College, and in the National Capital Region.

Distribution by Occupational Group

Our workforce is comprised of administrative, professional, and operational staff. Over 65% of CCG employees support programs and services that are delivered 24 hours a day, seven days a week. This includes Ships' Crew and Ships' Officers, who work at sea, and Marine Communications and Traffic Services Officers, who provide marine communications and traffic services.

Demographic shifts will be the biggest single influence on our workforce over the next three years, as increasing numbers of experienced employees are eligible for retirement. The Canadian Coast Guard Strategic Human Resources Plan 2008-2011 addressed these challenges by creating a framework for its recruitment, succession planning and learning activities. This year, as with our first Strategic Human Resources Plan, our emphasis will be on attracting and retaining a skilled workforce, improving the diversity of our workforce, focusing on training, learning and career development, and improving national consistency in human resources management.

2008-2009 Accomplishments

Attract and Retain a Skilled Workforce
- Launched a Fleet Human Resources Development Program featuring initiatives to bolster career development and knowledge transfer.

Improve the Diversity of Our Workforce
- Established an Operational Women's Network (OWN), representing women Ships' Officers and Ships' Crew.

Focus on Training, Learning and Career Development
- Consulted with managers, employees and bargaining agents and created a Learning and Development Framework, vision, and proposed action plan.
- Developed Learning Plans for 87% of our employees.

Improve National Consistency in Human Resources Management
- Finalized Standard Organization structure.
- Officially launched CCG's performance review system.

Table 1: Distribution by Occupational Group

Occupational Group	Number	Percentage of Total Workforce
Ships' Crew (SC)	1385	31.1
Ships' Officer (SO)	910	20.4
Marine Communications and Traffic Services Officers (RO)	368	8.3
Electronics Technologists (EL)	256	5.7
Engineering and Land Survey (EN)	75	1.7
Engineering Technologist (EG)	47	1.1
Clerical and Regulatory (CR)	225	5.0
General Technical (GT)	328	7.4
General Labour and Trades (GL)	295	6.6
Administrative Services (AS)	247	5.5
Executive (EX)	48	1.1
Lightkeepers (LI)	108	2.4
Student	14	0.3
Other	153	3.4
Total	**4459**	**100.00**

Bargaining Agents

Our workforce is represented by seven bargaining agents: the Public Service Alliance of Canada (PSAC); the Canadian Merchant Service Guild (CMSG); the Canadian Auto Workers (CAW - Local 2182); the International Brotherhood of Electrical Workers (IBEW); the Professional Institute of the Public Service (PIPSC); the Canadian Association of Professional Employees (CAPE); and the Association of Canadian Financial Officers (ACFO). Approximately 78% of CCG is represented by PSAC or CMSG.

Recruitment and Diversity

The *CCG Strategic Human Resources Plan 2009-2012* has identified the occupational groups that are most at-risk, highlighted in Table 1: Distribution by Occupational Group. It has also identified where more targeted recruitment efforts are required. To provide leadership for targeted outreach and recruitment and for effective succession planning, the Coast Guard will establish a National Labour Force Renewal Directorate.

Of CCG's workforce, 28.1% — or 1,255 employees — have self-identified as part of an employment equity group. Since 2004, we have seen fluctuations in representation for all employment equity groups and have closed the gap by approximately 13%, with the exception of the Visible Minority group for which the gap has increased by approximately 6%. We will continue to focus on decreasing the gaps over the next few years.

Targeted recruitment will also be an excellent opportunity to include specific measures to improve diversity within the Coast Guard. While progress has been made over the past few years, additional focus has to be placed on improving the overall representation of women and visible minorities. Improving diversity will continue to be included as a commitment in the performance agreements of all DGs and ACs and they will be held accountable to demonstrate concrete evidence of their efforts in the recruitment of designated group members.

Commitment	Lead
2009-2010	
Ensure the Operational Women's Network is fully engaged.	DG, Fleet
Establish a bi-annual report card system to track progress on the 2008-2011 Employment Equity Management Action Plan.	DG, IBMS

Training and Learning

Last year, the Canadian Coast Guard developed a Learning and Development Framework with a goal of improving national consistency in the planning, management and delivery of training. Consultations were held with managers, employees and bargaining agents on the new Framework that will help to maintain a skilled and professional workforce, able to deliver programs and services to the highest standard. Early in 2009-2010, the Framework will be distributed throughout Coast Guard, and clear and transparent learning and development budgets will be established. Investments in people (e.g. employee development, career progression and skills development) will be resourced to the extent possible, within available budgets.

Further, Coast Guard's forthcoming review of training and development expenditures over the past five years will give us a better understanding of component costs (tuition, fees, disbursements, travel and materials). It will also identify time/costs expended on developmental, management, and language training.

Individual learning plans are part of the annual Performance Review System, helping employees identify training requirements, developmental opportunities and career aspirations. In 2008-2009, learning plans were developed for 87% of CCG employees. This is a significant improvement over previous years.

In an effort to create a more enabling and citizen-focused workforce, in 2009-2010, CCG will put in place proactive measures to improve its overall official languages capacity with a special focus on service delivery to the public, language of work and learning and development.

In addition, the national Leadership Development Pilot Program, launched in 2007, will continue to be offered in five regions until 2010. To date, the program has given candidates an opportunity to develop their skills, to network and to attend senior management meetings.

Finally, a number of specific developmental or training programs are being put in place or improved.

Commitment	Lead
2009-2010	
Continue second phase of the national Leadership Development Pilot Program.	AC, NL
Promulgate the final version of the Learning and Development Framework.	AC, Pacific
Review of training and development expenditures from the past two years.	AC, Pacific
Enhance CCG College official language training capacity.	Executive Director, Canadian Coast Guard College (ED, CCGC)
Continue work to ensure that all CCG employees have a learning plan.	All CCG Managers
Establish clear and transparent learning and development budgets.	DGs and ACs
Develop action plan related to the observations of the OCOL following the review of second language capacity in the Maritimes Region.	AC, Maritimes
2010-2011	
Evaluate the national Leadership Development Pilot Program and determine next steps.	AC, NL

Improve National Consistency in Human Resources Management

The Coast Guard has made significant progress on its two key initiatives to improve national consistency of human resources management – the development of a Standard Organization and the introduction of a Performance Review System.

The Standard Organization is essential to ensuring that the Coast Guard conducts its business consistently from region to region. This includes consistency in service delivery, distribution of available resources and ensures that employees doing the same work, region to region, are classified and compensated equally. The Standard Organization will be launched in 2009-2010 and transition will take place over a three year period.

Our Performance Review System (PRS), designed to improve performance of individuals through frequent dialogue, was officially launched in April 2008. The PRS offers an achievable, sustainable and flexible process that allows all employees to receive a performance review. Over the course of this past year, seagoing personnel adapted the system and implemented a version tailored to their specific needs. For the performance review cycle in 2008-2009, results showed that 92% of employees have identified work objectives. CCG management will continue to encourage performance discussions and monitor the PRS.

In 2009-2010, Coast Guard will assess the results of the 2008 Public Service Employee Survey (PSES) and will distribute the findings to all employees and bargaining agents.

Commitment		Lead
2009-2010		
Launch and begin transition to standard organization, which includes finalizing development of national model work descriptions for technical and seagoing positions.	AG A-Base PSES	DGs and ACs
Assess the results of the 2008 PSES and distribute the findings to employees and bargaining agents.		DG, IBMS
2010-2011		
Continue transition to standard organization.	AG A-Base PSES	DGs and ACs
2011-2012		
Complete transition to standard organization.	AG A-Base PSES	DGs and ACs

(4) WHAT WE DO EVERY DAY

This section describes the day-to-day activities related to the programs and services Coast Guard provides to Canadians. It also highlights areas where significant investment is occurring and notes key initiatives aimed at improving the delivery of programs and services.

Overview of Financial and Human Resources

Table 2 presents estimates of planned spending on salary, other operations and maintenance (O&M), total operations, and major capital to provide CCG services to Canadians in 2009-2010. These costs are provided for our 10 Program Activity Architecture (PAA) sub-activities.

Table 2: CCG Planned Spending by PAA Sub-activity, 2009-2010 (thousands of dollars)

PAA Sub-activity	Salary	Other Operations and Maintenance (O&M)*	Total Operating	Major Capital	Grants and Contributions	Total Planned Spending**
Aids to Navigation Services	11,924.2	10,163.0	**22,087.2**	-	-	**22,087.2**
Waterways Management Services	2,911.6	7,133.9	**10,045.5**	-	-	**10,045.5**
Marine Communications and Traffic Services	32,495.7	7,904.9	**40,400.6**	-	-	**40,400.6**
Icebreaking Services	961.1	19,066.9	**20,028.0**	-	-	**20,028.0**
Search and Rescue Services	10,892.2	16,986.3	**27,878.5**	-	4,888.0	**32,766.5**
Environmental Response Services	6,189.0	4,495.7	**10,684.7**	-	150.0	**10,834.7**
Maritime Security	3,893.4	5,464.4	**9,357.7**	-	-	**9,357.7**
Coast Guard College	6,305.7	7,831.8	**14,137.6**	-	-	**14,137.6**
Coast Guard Fleet Operational Readiness *	166,036.8	62,219.2	**228,255.9**	200,069.7	-	**428,325.6**
Lifecycle Asset Management Services	59,172.8	27,705.5	**86,878.3**	56,336.3	-	**143,214.6**
Total	**300,782.5**	**168,971.6**	**469,754.1**	256,406.0	5,038.0	**731,198.1**

* *O&M includes fuel for DFO Fisheries + Aquaculture Management (FAM), Science & Northwest Atlantic Fisheries Organization (NAFO)*
** *Excludes Vote-Netted Revenue (VNR)*

Table 3 presents estimates of the cost of delivering CCG programs and services, but with the operating costs of Coast Guard Fleet Operational Readiness and Lifecycle Asset Management allocated to the PAA sub-activities these activities support. Also included in this table is the cost of providing services to non-CCG clients such as DFO Science and the Northwest Atlantic Fisheries Organization.

Table 3: CCG Service Costs by PAA Sub-activity, 2009-2010 (thousands of dollars)

PAA Sub-activity	Direct Program Operating	Allocation of Operating From:		Total Service Cost (Operating)
		Coast Guard Fleet Operational Readiness	Lifecycle Asset Management Services	
Aids to Navigation Services	22,087.2	35,049.9	36,638.6	**93,775.7**
Waterways Management Services	10,045.5	891.9	748.0	**11,685.4**
Marine Communications and Traffic Services	40,400.6	1,215.6	17,547.1	**59,163.3**
Icebreaking Services	20,028.0	36,411.5	10,244.7	**66,684.2**
Search and Rescue Services	27,878.5	79,679.4	17,935.6	**125,493.5**
Environmental Response Services	10,684.7	778.0	747.8	**12,210.4**

Table 3 continued on next page...

PAA Sub-activity	Direct Program Operating	Allocation of Operating From:		Total Service Cost (Operating)
		Coast Guard Fleet Operational Readiness	Lifecycle Asset Management Services	
Maritime Security	9,357.7	13,481.2	2,821.2	**25,660.0**
Coast Guard College	14,137.6	-	195.4	**14,332.9**
Total Coast Guard Program	**154,619.8**	**167,507.4**	**86,878.3**	**409,005.6**
Science	N/A*	34,790.5	-	**N/A**
Conservation & Protection	N/A	18,992.4	-	**N/A**
Northwest Atlantic Fisheries Organization	N/A	6,965.6	-	**N/A**
Total	**154,619.8**	**228,255.9**	**86,878.3**	**469,754.1**

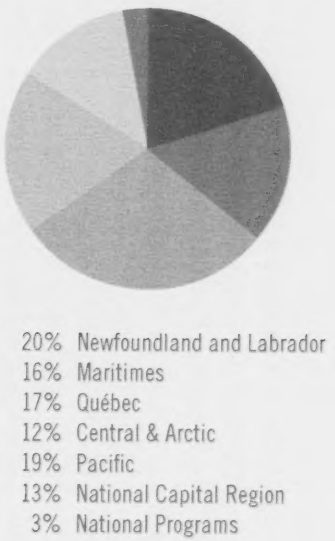
* *Not applicable*

For more financial information on CCG, see Section 5.

Table 4: Total Number of CCG Full-time Equivalents (FTEs), Utilization by PAA Sub-activity

PAA Sub-activity	O&M FTEs	Major Capital FTEs	Total FTEs
Aids to Navigation Services	194.3	-	**194.3**
Waterways Management Services	35.9	-	**35.9**
Marine Communications and Traffic Services	442.8	-	**442.8**
Icebreaking Services	7.5	-	**7.5**
Search and Rescue Services	149.6	-	**149.6**
Environmental Response Services	82.8	-	**82.8**
Maritime Security	13.1	-	**13.1**
Coast Guard College	198.9	-	**198.9**
Coast Guard Fleet Operational Readiness	2,641.5	38.0	**2,679.5**
Lifecycle Asset Management Services	842.7	149.0	**991.7**
Total	**4,609.1**	**187.0**	**4,796.1**

Figure 2: Financial Allocations by Region, 2009-2010



Services by PAA Sub-Activity

Aids to Navigation

The Aids to Navigation program provides marine navigational aids such as short-range marine aids — including visual aids (lighthouses and buoys), sound aids (fog horns), and radar aids (reflectors and beacons) — as well as long-range marine aids, such as the Differential Global Positioning System (DGPS). The program's services ensure access to a reliable navigation system and support a safe, accessible, and efficient environment for the commercial marine transportation sector and pleasure craft operators. As such, it is the cornerstone of Canada's navigation system and an enabler to many government priorities.

What we do...

The program helps mariners navigate safely and efficiently by:

- Operating a system of floating, fixed, and electronic aids to navigation;
- Monitoring the reliability and relevance of the Canadian aids to navigation system;
- Ensuring the application of national standards for aids to navigation; and
- Providing and distributing safety information in the form of Notices to Mariners (NOTMAR).

The Aids to Navigation program is delivered with the support of...

- CCG Fleet, which is the principal asset used by CCG's Aids to Navigation program to tend buoys — a significant activity within the program;
- Various contractors, to complement the buoy service work performed by CCG Fleet;
- CCG Integrated Technical Services, which ensures that our aids to navigation assets, both electronic and traditional, are capable, reliable, and available through the implementation of a lifecycle management system; and
- Consultation with stakeholders at the local level, which precedes changes to any aids to navigation system to ensure that local users' input is taken into account.

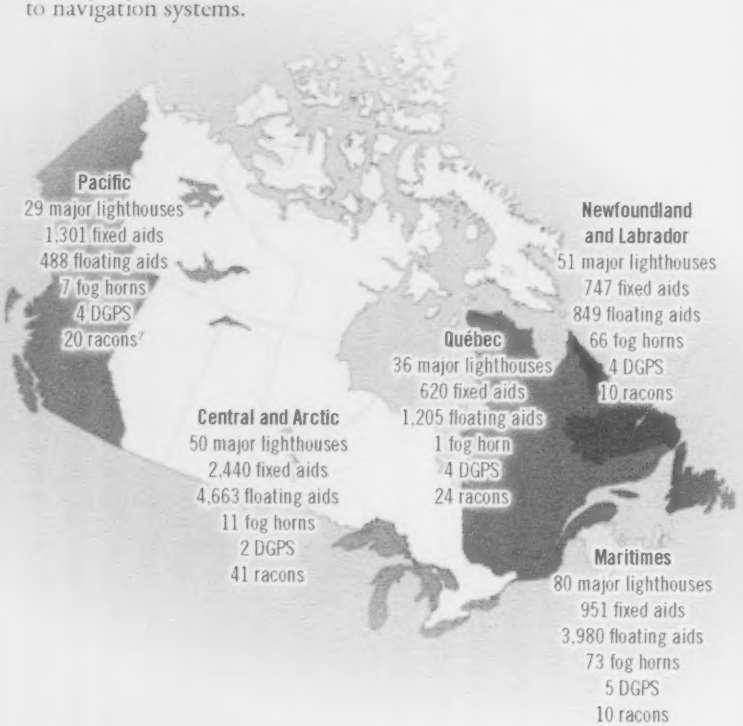
Looking Forward...

CCG's Aids to Navigation program continues to evolve in a world of constant technological change. Thanks to CCG's AtoN21 initiative, the program now benefits from a lighting system relying almost exclusively on LED technology. In addition, where practical, buoys are now made of plastic, which greatly reduces reliance on large vessels and maintenance costs for their tending. Work is also under way to introduce a new four-season lighted buoy that will reduce maintenance and provide mariners with enhanced capabilities, especially in the winter. CCG is now focusing on updating its governing directives for aids to navigation to ensure they reflect the new technological realities. The advent of the e-Navigation concept and its many possibilities is also being monitored for potential impacts and opportunities, such as the introduction of virtual aids to navigation systems.

2008-2009 Accomplishments

Aids to Navigation Services

- Designed and reviewed aids to navigation systems according to the established cyclical review process.
- Continued the publication and distribution of safety information and various aids to navigation publications.
- Continued the development and implementation of four-season lighted spar buoys.



2 Racon is an acronym for RAdar beaCON. It is a type of radar transponder commonly used to mark a marine navigational hazard.

Aids to Navigation Services

Provides these services...	Measured this way...*	With these targets...
• Operational aids to navigation systems **	• Reliability of short-range aids to navigation • Reliability of long-range aids to navigation (Signal availability of DGPS)	• 99% (over a three-year average) • Signal availability of at least 99%
• Navigation safety information **	• Timely publication of Notices to Mariners (NOTMAR)	• 100% of the 12 NOTMARs published at the end of each month

To achieve this result...	Measured this way...*	With these targets...
• Aids to Navigation systems and information facilitate safe and expeditious movement of maritime traffic	• Number of ships other than pleasure crafts involved in a marine accident due to striking	• Maintain a five-year annual average; 2001-2005 average for strikings = 80

* *These are the performance indicators in the CCG Performance Measurement Framework.*

** *In accordance with* Levels of Service and Service Standards *(www.ccg-gcc.gc.ca).*

Table 5: Aids to Navigation Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador*	3,123.1	1,772.4	**4,895.6**
Maritimes	1,020.9	1,769.0	**2,789.9**
Quebec	650.9	1,186.4	**1,837.3**
Central and Arctic	967.2	1,199.6	**2,166.9**
Pacific*	3,678.5	2,957.5	**6,636.0**
National Capital Region	2,483.6	1,153.7	**3,637.2**
National Programs**	-	124.4	**124.4**
Direct Program Total	**11,924.2**	**10,163.0**	**22,087.2**
Coast Guard Fleet Operational Readiness Allocation	25,495.8	9,554.1	**35,049.9**
Lifecycle Asset Management Services Allocation	24,954.5	11,684.0	**36,638.6**
Total Service Cost	**62,374.6**	**31,401.1**	**93,775.7**

* *Salary differences between regions are largely due to variations in activities related to lighthouses. Of 246 Canadian major lighthouses, 51 are staffed. CCG maintains 23 lighthouses in the Newfoundland and Labrador Region, 27 in the Pacific Region, and, for sovereignty reasons, 1 in the Maritimes Region. Canada is one of the few countries that continue to staff lighthouses.*

** *National Programs consist of $124.4K in research and development.*

Reinvestment in the Asset Base

Aids to Navigation capital projects focus on the following:

- Ensuring CCG compliance with various codes and standards, including health and safety codes and Canadian Standards Association (CSA) standards;
- Addressing potential liability issues and general mariner safety; and
- Facilitating safe access and navigation in Canadian waters.

We expect to spend $10.4 million in 2009-2010 on capital projects related to these services. For a full description of these capital expenditures, see Annex A.

Waterways Management Services

Navigability in Canadian waterways is highly influenced by water levels and the bottom condition of shipping channels. The monitoring and maintenance services provided by the Waterways Management program enable CCG to help ensure safe, economical, and efficient movement of ships in Canadian waterways. These services also contribute to the maintenance of specific navigable channels, reduce marine navigation risks, and support environmental protection.

2008-2009 Accomplishments

Waterways Management Services

- Monitored bottom conditions in 730 kilometres of Canada's main shipping channels.
- Provided users with information on bottom conditions, water levels, and forecasts of water levels for the St. Lawrence, St. Clair & Detroit, Fraser and Mackenzie Rivers.

What we do...

- Provide users with marine safety information, including water-depth forecasts in the commercial channels in the St. Lawrence, Detroit and St. Clair, Fraser, and Mackenzie Rivers;
- Monitor and maintain channel conditions in certain areas, including managing channel dredging in specific areas, monitoring channel bathymetry, contributing to the international control of water levels in the St. Lawrence River, and operating the Canso Canal;
- Provide guidelines and analysis on channel design and use; and
- Manage 47 marine structures.

The Waterways Management program is delivered with the support of:

- Canadian Hydrographic Service, CCG Fleet, and Environment Canada for services such as conducting bottom sounding surveys in specific waterways and the provision of water level depth forecasts for mariners to plan safe and efficient passage, and to maximize their vessel cargo.
- Public Works and Government Services Canada (PWGSC), for services such as bottom-sounding surveys, dredging, and the adequate disposal of sediments.
- DFO Real Property Directorate, for the lifecycle management of marine structures; and
- CCG Integrated Technical Services, for the management of the information system and communication services of MARINFO in the Quebec Region.

Looking Forward...

The Waterways Management program is influenced by climatic change, bigger and faster vessels, increasing pressure to maximize water levels and channel depths for optimum loading, safety manoeuvring limits, and this increases the need to maintain our engineering guidelines for the design, maintenance and utilization of commercial channels. Users will also continue to ask for waterways conditions such as water depth forecasts and channel bottom information.

In this context, the program needs to be constantly aware of innovations in technologies and management practices that can support more efficient operations. Well-managed partnerships are also essential for efficient coordination and the avoidance of duplication of activities with internal and external partners. The Waterways Management program is continually integrating new initiatives to improve the information it provides to its clients. In line with this objective, the program provides a four-week advance forecast of water levels in the St. Lawrence River and another water-level forecast called the AVADEPTH service in the Pacific Region; the program is also deeply involved in the MARINFO project in the Quebec Region and in the definition and implementation of e-Navigation in CCG.

Waterways Management Services

Provides these services...	Measured this way...*	With these targets...
• Dredging of the Canadian portions of the Great Lakes connecting Channels and St. Lawrence River maintained and managed **	• Percentage and actual number of kilometers of channel dredged vs planned	• 100%
• Main commercial shipping channel bottoms surveyed**	• Actual number of kilometers of channels surveyed vs planned	• 100%
• Water Level Forecasts **	• Timely provision of water level forecast	• Forecasts 100% on time

To achieve this result...	Measured this way...*	With these targets...
• Waterways management and information help ensure accessibility of main commercial shipping channels and contribute to their safe use **	• Number of ships other than pleasure crafts involved in a marine accident due to a grounding	• Maintain a five year annual average: 2001-2005 average for groundings = 111

* *These are the performance indicators in the CCG Performance Measurement Framework.*

** *In accordance with* Levels of Service and Service Standards *(www.ccg-gcc.gc.ca).*

Table 6: Waterways Management Services Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	-	24.1	**24.1**
Maritimes	823.6	969.2	**1,792.8**
Quebec*	1,089.4	3,739.0	**4,828.4**
Central and Arctic	82.4	1,345.1	**1,427.5**
Pacific	248.1	886.4	**1,134.4**
National Capital Region	668.1	170.2	**838.3**
National Programs	-	-	-
Direct Program Total	**2,911.6**	**7,133.9**	**10,045.5**
Coast Guard Fleet Operational Readiness Allocation	648.8	243.1	**891.9**
Lifecycle Asset Management Services Allocation	509.4	238.5	**748.0**
Total Service Cost	**4,069.8**	**7,615.6**	**11,685.4**

* *Includes $4,600.0K for dredging that is fully recovered through vote-netted revenue.*

Key Initiative

Post-Panamax Study, St. Lawrence River

Given the increase in marine traffic that is widely expected to occur in the near future, Canadian ports are seeking ways to increase their competitiveness. Shipping industry representatives have informed us of their plans to use new-generation post-Panamax vessels, especially on the restricted channel of the St. Lawrence River between Quebec City and Montreal. Post-Panamax[3] vessels do not meet current CCG guidelines for allowing vessels to travel in both directions in some sections of the shipping channel.

In 2008-2009, in partnership with Transport Canada (TC), the Laurentian Pilotage Authority, and shipping industry representatives, we participated in a risk assessment to aid in the decision to authorize wide-beam vessels to navigate the St. Lawrence River up to the port of Montreal. A draft report is expected in mid 2009. In 2009-2010, CCG and TC will analyze the recommendations of the report and propose next steps, which could include the implementation of the recommendations, justifications for additional analysis, or any other actions required to complete the study.

Commitment	Lead
2009-2010	
Develop recommendations on operational conditions and restrictions for vessels based on the Post-Panamax study.	AC, Quebec DG, MS

3 Panamax vessels are those whose dimensions are such that they can fit through the locks of the Panama Canal. Post-Panamax vessels are larger than Panamax vessels, and they therefore cannot fit through the locks of the Panama Canal.

Marine Communications and Traffic Services

Safety of mariners and environmental protection in Canadian waters is highly dependent on the efficient and timely communication of information. With centres located across Canada, the Marine Communications and Traffic Services (MCTS) program is CCG's communication backbone. By ensuring that an efficient communication system is available on a 24/7 basis, the program contributes to the safety of life at sea, the protection of the marine environment, the efficient movement of shipping in waterways, and the provision of essential and accurate information to mariners. Its services are essential to deploying Search and Rescue and Environmental Response teams promptly and effectively to maritime crisis situations. MCTS is, in many situations, the only means by which a ship's call for assistance can be heard.

2008-2009 Accomplishments

Marine Communications and Traffic Services

- Finalized planning for the navigational warning system in the Arctic.
- Fulfilled the requirements of the new *Canada Shipping Act, 2001*. by implementing new procedures.
- Conducted two national recruitment campaigns, resulting in 30 new recruits to the CCG College.

What we do...

- Manage ship traffic movements and radio contacts, delivering navigational information and assistance to vessels and ensuring a safe and orderly flow of marine traffic;
- Provide distress and safety communications and coordination to detect distress situations, ensure timely assistance, and save lives;
- Provide vessel screening to prevent the entry of unsafe vessels into Canadian waters; and
- Manage an integrated marine information system that initiates the emergency response network and supports other government departments.

The Marine Communications and Traffic Services program is delivered with the support of...

- CCG Integrated Technical Services (ITS). Given the reliance on technology for delivery of the program, MCTS receives critical engineering and technical support from ITS.
- Environment Canada (EC) and Transport Canada (TC), through Memoranda of Understanding. EC supplies essential marine weather and ice information, and TC provides the regulatory regime for Vessel Traffic Services (VTS) and ship radio requirements.
- The United States Coast Guard, via a treaty, for vessel traffic management in the Juan de Fuca Strait.

Looking Forward...

The MCTS program is highly dependent on new technology driven by international fora such as the International Maritime Organization and the International Telecommunication Union; on changes in the marine transportation industry, which has seen the introduction of ever bigger and faster vessels; and on heightened security concerns. Of particular importance for the MCTS program is the implementation of e-Navigation. The advent of e-Navigation is expected to offer opportunities for increased efficiencies for the MCTS program and the potential for reviewing VTS Levels of Service.

The MCTS program has first to ensure its continuity. Twenty-five percent of the MCTS workforce could leave during the next five years through retirement. CCG has made the recruitment of new officers a priority, and more than 70 new officers have been trained in the past three years. An average of 24 officers will be recruited annually in the coming years. For this reason, Radio Operations (ROs) has been identified as an at-risk group in CCG's Strategic Human Resources Plan.

Marine Communications and Traffic Services

Provides these services...	Measured this way...*	With these targets...
• Responses to distress and safety communications**	• MCTS Centres operations availability NOTE: radio channels are continuously monitored	• 24/7 availability for MCTS Centres and operators; 100 %
• Screening and issuance of Vessel/ traffic clearances to ships of 500 tons - gross tonnage or more entering Canadian waters (Great Lakes not included)**	• Number of clearances	• Benchmark = 15,200
• Marine safety information **	• Number of Notships issued	• Benchmark = 13,000

To achieve this result...	Measured this way...*	With these targets...
• Safety of life at sea, efficient movement of shipping, and provision of essential information to mariners	• Number of ships other than pleasure crafts involved in a marine accident due to a collision	• Maintain a five year annual average; 2001-2005 average = 17

* *These are the performance indicators in the CCG Performance Measurement Framework.*

** *In accordance with* Levels of Service and Service Standards *(www.ccg-gcc.gc.ca).*

Table 7: Marine Communications and Traffic Services Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	5,212.7	838.0	**6,050.8**
Maritimes	5,431.8	607.6	**6,039.4**
Quebec	6,095.2	405.3	**6,500.5**
Central and Arctic*	4,406.0	1,741.6	**6,147.6**
Pacific**	8,800.9	1,977.1	**10,777.9**
National Capital Region	2,074.0	1,413.8	**3,487.8**
National Programs***	475.0	921.6	1,396.6
Direct Program Total	**32,495.7**	**7,904.9**	**40,400.6**
Coast Guard Fleet Operational Readiness Allocation	884.3	331.4	**1,215.6**
Lifecycle Asset Management Services Allocation	11,951.3	5,595.8	**17,547.1**
Total Service Cost	**45,331.3**	**13,832.1**	**59,163.3**

* *Central and Arctic Region O&M resources are higher than those in the other regions because of the Northern housing allowance and travel cost to the North.*

** *Pacific Region salary dollars are higher because of the need to staff more MCTSOs in response to the region's marine traffic volume.*

*** *National Programs consist of $1,343.3K in the Automatic Identification System project and $53.3K in research and development.*

Key Initiatives

NAVAREAS

NAVAREAs are geographical sea areas established by the International Maritime Organization to coordinate the transmission of navigational warnings to mariners. In October 2007, the IMO confirmed Canada in its role as international coordinator and issuing service for navigational warnings for two NAVAREAs in the Arctic.

In 2008-2009, we worked with domestic and international partners to finalize the planning of the international service. During the upcoming planning year, we are seeking funding approval to purchase equipment and train personnel to begin the service on January 1, 2010, on a test basis.

Commitment	Lead
2009-2010	
Initial testing of operating condition.	DG, MS DG, ITS AC, C&A
2010-2011	
Implement the service through the advertisement and commencement of NAVAREA transmissions.	DG, MS DG, ITS AC, C&A

Canada Shipping Act, 2001

The *Canada Shipping Act, 2001* affected MCTS in two key ways:

- MCTS Officers (MCTSOs) are now able to direct vessels in a wider range of circumstances than before.
- MCTSOs now have a clearer role to direct only vessels under their authority, not all the vessels in a vessel traffic services zone.

In 2008-2009, information sessions were provided to MCTSOs, all of our documentation pertinent to *Canada Shipping Act, 2001* was updated, and CCG met with Transport Canada to discuss the development of an enforcement strategy to ensure compliance with the Act. During 2009-2010, we will offer our support to Transport Canada personnel to develop the new Vessel Traffic Services Regulations and an enforcement strategy.

Commitment	Lead
2009-2010	
Support Transport Canada, in the development of new Vessel Traffic Services Regulations and in an enforcement strategy.	DG, MS
2010-2011	
Implement the new Vessel Traffic Services Regulations.	DG, MS

Marine Communications and Traffic Services Technical Training

The development of a training framework for the MCTS program is critical to CCG operations. The MCTS training framework will include a variety of initiatives to support the MCTS workforce of about 400 certified MCTSOs to ensure professional development and adequate recruitment.

In 2008-2009, we initiated the development of a training framework and long-term strategy to meet MCTS technical training requirements for the 21st century. This included conducting two national recruitment campaigns, resulting in 30 recruits entering the Canadian Coast Guard College. In the upcoming planning year, we will develop a refresher course and competency profile for MCTS Officers.

Commitment	Lead
2009-2010	
Develop a refresher course and implementation strategy for existing Marine Communications and Traffic Services Officers.	DG, MS ED, CCGC
2010-2011	
Implement a refresher course for existing Marine Communications and Traffic Services Officers.	DG, MS ED, CCGC
2011-2012	
Review the Marine Communications and Traffic Services ab-initio[4] development program.	DG, MS

Reinvestment in the Asset Base

MCTS capital projects focus on the following:

- Improving and modernizing existing communications and information systems;
- Providing enhanced maritime security; and
- Contributing to the safety of navigation in Canadian waters.

We are making substantial investments in assets related to MCTS. There are 12 separate projects under way, most of which are multi-year. We expect to spend over $25.2 million on these projects in 2009-2010. For a complete list of projects and a description of each, see Annex A.

4 An ab-initio is a person who is recruited and selected to participate in the MCTS Officer Training and Certification program in order to acquire the knowledge and skill requirements of a MCTS Officer.

Icebreaking Services

Given the harsh challenges the extremes of Canadian geography and climate bring to maritime traffic, icebreaking services are essential to ensure that shipping moves safely and efficiently through and around ice-covered waters in Eastern Canada and the Great Lakes throughout the winter, as well as during the summer navigation season in the Arctic. Icebreaking operations facilitate the informed, safe, and timely movement of maritime traffic and contribute to keeping most Canadian ports open for business year-round, preventing flooding on the St. Lawrence River and supporting fishers, the marine industry, and numerous coastal communities.

2008-2009 Accomplishments

Icebreaking Services

- Escorted 394 ships in southern Canada between April 1 and the end of the winter season.
- Escorted 29 ships in the Arctic between June and November, for a total of 1,350 hours of assistance.

What we do...

- Respond to requests for icebreaking support;
- Provide route assistance and information on ice reconnaissance;
- Monitor the resupply of isolated Northern settlements;
- Manage flood prevention on the St. Lawrence River through the monitoring, prevention, and breaking up of ice jams;
- Support harbour breakouts; and
- In partnership with the Canadian Ice Service, provide ice charts to marine shipping to ensure the safe movement of vessels in the winter.

The Icebreaking Services program is delivered with the support of...

- CCG Fleet, which operates 6 icebreakers in the Arctic between June and November and 17 icebreaking vessels for winter operations on the East Coast of Canada, the St. Lawrence River, and the Great Lakes between December and May.
- A partnership agreement with Environment Canada's Canadian Ice Service, to provide CCG with essential marine weather and ice information.
- Ice Operations Centres, which ensure that ice information is disseminated to vessels by radio, Internet, fax, etc., and that icebreakers are strategically positioned. Ice Operations Centres are located in St. John's, NL; Dartmouth, NS; Quebec City, QC; and Sarnia, ON.
- An agreement with the United States Coast Guard for joint icebreaking operations on the Great Lakes, to maximize icebreaking support capability and effectiveness for both nations.

Looking Forward...

Climate change and economic development have led to demands for extended periods of navigation through ice both in the South and in the Arctic. Given the need to maximize resource utilization, the program needs to be constantly aware of innovations in technologies and management practices that can support more efficient operations. Quality and readily available ice information is of particular importance to vessels navigating through and around ice-covered waters. Satellite imagery and enhanced marine radars, for example, can support the timely detection and recognition of dangerous ice, thereby reducing navigation times. Well-managed partnerships are also essential for the efficient coordination of activities with internal and external partners. The Icebreaking Services program is continually integrating new initiatives to improve the information it provides to its clients. In 2009-2010, the program intends to participate in an economic analysis of the impacts of its services on Eastern and Central Canada and the Arctic.

Icebreaking Services

Provides these services...	Measured this way...*	With these targets...
• Icebreaking services **	• Percentage of icebreaking services provided	• 100%
• Ice-related information during ice-seasons **	• Number of ice charts produced	• To meet annual Service Level Agreement

To achieve this result...	Measured this way...*	With these targets...
• Informed, safe and timely movement of maritime traffic through and around ice-covered waters is facilitated.	• Number of ships other than pleasure crafts damaged by ice	• Five year average of 12

* *These are the performance indicators in the CCG Performance Measurement Framework.*

** *In accordance with* Levels of Service and Service Standards *(www.ccg-gcc.gc.ca).*

Table 8: Icebreaking Services Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	62.1	3,637.4	**3,699.5**
Maritimes	91.0	1,661.0	**1,752.0**
Quebec	160.0	3,730.5	**3,890.5**
Central and Arctic	82.4	139.4	**221.8**
Pacific	-	576.3	**576.3**
National Capital Region	565.7	311.9	**877.5**
National Programs*	-	9,010.4	9,010.4
Direct Program Total	**961.1**	**19,066.9**	**20,028.0**
Coast Guard Fleet Operational Readiness Allocation	26,486.3	9,925.2	**36,411.5**
Lifecycle Asset Management Services Allocation	6,977.7	3,267.0	**10,244.7**
Total Service Cost	**34,425.1**	**32,259.2**	**66,684.2**

* *National Programs consist of $8,900.0K for the national agreement with Environment Canada to provide the Ice Reconnaissance Service and $110.4K in research and development.*

Search and Rescue Services

Canada is a maritime nation bounded by three oceans whose population and economy make significant use of waterways for commercial and recreational use. The marine environment can be dangerous, and CCG is an important player in responding to emergencies that occur on water.

The federal Search and Rescue (SAR) program is a cooperative effort by federal, provincial, and municipal governments. CCG's SAR program, in conjunction with the Canadian Coast Guard Auxiliary, leads, delivers, and maintains preparedness for the 5.3 million square kilometre maritime component of the federal SAR system. Through distress monitoring, communication, and search and rescue activities, the CCG SAR program increases the chances of rescue for people caught in dangerous on-water situations.

2008-2009 Accomplishments

Search and Rescue Services

- Implemented a new five-year Contribution Agreement with the CCG Auxiliary.
- Completed the Search and Rescue Needs Analysis.

What we do...

- Coordinate and manage the response to marine SAR cases, rescuing close to 2,900 people a year across Canada and supporting the protection of human life at sea;
- Assist the Department of National Defence (DND) with aeronautical and humanitarian cases;
- Operate in-shore rescue boats during the summer season; and
- Manage partnerships, which are essential for the efficient coordination of activities.

The Search and Rescue program is delivered with the support of:

- CCG Fleet, which operates a total of 116 multitasked vessels, all with SAR responsibilities.
- A partnership with DND, which is the lead department for the coordination of all aeronautical and marine SAR and is responsible for the three Joint Rescue Coordination Centres (JRCCs), which are located in Halifax, Trenton, and Victoria and staffed by both DND and CCG personnel. CCG operates two Marine Rescue Sub-Centres (MRSCs), in St. John's and Quebec City, which report to a Joint Rescue Coordination Centre.
- A partnership with the CCG Auxiliary, the CCG Auxiliary consists of some 4,300 volunteers using 1,200 vessels that are either individually owned boats or community vessels. They respond to approximately one-quarter of all marine SAR cases.

Looking Forward...

Continuous effort to ensure efficient partnerships is essential to the future of the SAR program. In addition, the program needs to be constantly aware of innovations in technologies and management practices that can support more efficient operations. Changing demographics and economic activities will also impact SAR needs across the country.

Search and Rescue Services

To achieve this result...	Measured this way...	With these targets...
• Prevention of loss of life and injury	• Percentage of lives saved vs lives at-risk	• 90% overall; this figure represents an operational benchmark, while the target — although operationally unattainable — is that CCG saves 100% of lives at risk

Search and Rescue Services – CCG

Provides these services...	Measured this way...*	With these targets...
• SAR co-ordination and response **	• Percentage of primary SAR vessels meeting reaction time of 30 minutes or less for maritime incidents	• 99%

To achieve this result...	Measured this way...*	With these targets...
• Search and rescue alerting, responding and aiding activities using public and private resources. **	• Number of people assisted by Maritime SAR Program, i.e. people who were not in a distress situation but required assistance	• Benchmark of 13,142 based on average of last four years

* *These are the performance indicators in the CCG Performance Measurement Framework.*

** *In accordance with* Levels of Service and Service Standards *(www.ccg-gcc.gc.ca).*

Search and Rescue Services – CCG Auxiliary		
Provides these services...	**Measured this way...***	**With these targets...**
• Maintain capacity to respond to SAR taskings**	• Number of CCGA members • Number of CCGA vessels	• Benchmark = 4,266 • Benchmark = 1,209
To achieve this result...	**Measured this way...***	**With these targets...**
• Support to CCG SAR activities**	• Percentage of CCGA participation in maritime SAR incidents	• 25%

* *These are the performance indicators in the CCG Performance Measurement Framework.*

** *In accordance with* Levels of Service and Service Standards *(www.ccg-gcc.gc.ca).*

Table 9: Search and Rescue Services Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	1,852.6	6,775.5	**8,628.2**
Maritimes	2,743.5	1,892.9	**4,636.4**
Quebec*	927.2	2,657.1	**3,584.4**
Central and Arctic	1,817.0	2,370.0	**4,187.0**
Pacific	1,720.6	1,070.6	**2,791.3**
National Capital Region	1,831.2	1,448.6	**3,279.7**
National Programs**	-	771.6	**771.6**
Direct Program Total	**10,892.2**	**16,986.3**	**27,878.5**
Coast Guard Fleet Operational Readiness Allocation	57,960.0	21,719.4	**79,679.4**
Lifecycle Asset Management Services Allocation	12,216.0	5,719.7	**17,935.6**
Total Service Cost	**81,068.1**	**44,425.4**	**125,493.5**

* *In the Quebec region, SAR services are co-delivered with Operational Services; the associated salary dollars are under the Fleet Operational Readiness sub-activity.*

** *National Programs consist of $733.2K under the New Initiative Fund and $38.4K under research and development.*

Key Initiatives

Search and Rescue Needs Analysis

A needs analysis of the Search and Rescue program that included consultations and the preparation of a report on our findings has been conducted. The goals of the analysis were to assess the SAR resources needed to respond to incidents in the maritime areas for which Canada has accepted responsibility and to validate the existing Levels of Service or propose changes.

Search and Rescue services are delivered to different service standards across Canada. The SAR needs analysis reviewed, updated, and assessed all factors (e.g., traffic, meteorological, and incident trends) affecting the existing Levels of Service.

In 2008-2009, in cooperation with our partners in SAR delivery, we developed a strategy to address the findings of the SAR needs analysis. To advance the work completed on the SAR needs analysis, we will focus during 2009-2010 on developing a plan so that recommendations can be implemented as funding becomes available. In 2008-2009 we announced the establishment of a new lifeboat station in Kégaska on the Lower North shore of Quebec, as recommended in the SAR Needs Analysis.

Commitment		Lead
2009-2010		
Develop a plan to implement the appropriate recommendations from the Search and Rescue needs analysis.	AG A-Base	DG, MS
2010-2011		
Continue implementation of the recommendations of the Search and Rescue needs analysis.	AG A-Base	DG, MS

Search and Rescue Capability

We continue to strive to address the most pressing operational human resources requirements to ensure the continuity of our services and to respond to the needs of our employees. In 2008-2009, we completed Terms of Reference and signed a Memorandum of Understanding with Government Services Canada to identify SAR capability requirements within the five Rescue Centres through a workload analysis. In 2009-2010, we will complete this study to address regulatory, operational, and maintenance (refresher) requirements in the context of continuous learning, flexible delivery of training, workload, and structure of the SAR Rescue Centres. The operational relations between Maritime Rescue Sub-Centres and Joint Rescue Coordination Centres were also the subject of some focus in the investigations into the capsizing of *L'Acadien II* (see page 50).

Commitment	Lead
2009-2010	
Complete the workload analysis, analyze findings and develop action plan.	DG, MS
2010-2011	
Implement the approved action plan.	DG, MS

Canadian Coast Guard Auxiliary

Canadian mariners have a strong tradition of responding to distress calls from vessels in trouble. Canada's vast and often inhospitable coastline, combined with unpredictable weather, has ensured that these situations are far from uncommon. It is not possible for the Canadian Coast Guard to cover the entire coastline, and for many decades CCG has relied on volunteers to supplement its response efforts. In 1978-1979, this loose network of volunteers was formalized with the creation of the Canadian Marine Rescue Association (CMRA), later renamed the Canadian Coast Guard Auxiliary (CCGA).

The Auxiliary is organized into six federally incorporated, not-for-profit volunteer organizations that parallel the five CCG regions, as well as one that is organized at the national level. The Minister of Fisheries and Oceans maintains a formal Contribution Agreement with each of the six CCGA corporations. The corporations are separate legal entities from the Government of Canada and work in close partnership with CCG.

From the nearly 4,300 members of the Auxiliary, approximately 90% are commercial fishers and pleasure boaters who donate their time and vessels to assist the CCG. The remaining CCGA members are volunteers from local communities who enrol to crew community-based dedicated response vessels 24 hours and seven days a week. In addition to their time, the CCGA members make available to the Government of Canada some 1,200 personal and community operated vessels.

CCGA is reflected in some notable statistics. For instance, since inception, the CCGA have responded to over 48,700 search and rescue taskings. In 2007, the CCGA responded to 1,829 SAR taskings, participated in 1,567 training exercises, and volunteered over 241,000 hours. Every year, the CCGA responds to approximately 25% of all maritime SAR incidents in Canada and is credited with saving approximately 1,000 lives each year.

CCGA services benefit domestic and international recreational boaters, personnel aboard commercial vessels, fishing vessels, oil/gas platforms, aircraft, provincial ferries and any other persons in distress. Since the CCGA units are strategically located across Canada they are often first on the scene at a SAR incident. The Canadian Coast Guard Auxiliary helps to bridge a very important gap between the beginning of a search and the arrival of government maritime and air units. In many instances, the Auxiliary is the only resource available.

In addition to responding to SAR incidents, the Auxiliary engages in vital incident-prevention activities to reduce the number and severity of maritime SAR incidents. Prevention includes training and familiarization patrols; the reporting of out-of-position, damaged, and malfunctioning aids to navigation; demonstrations of search and rescue equipment; and the provision of SAR prevention patrols for sailing regattas, yacht races, and fireworks displays.

The Auxiliary's local knowledge, maritime experience, seafaring talents, and professional conduct in discharging SAR and education responsibilities make CCGA one of Canada's greatest maritime volunteer assets.

Commissioner's Commendation Awarded to R. Jack Kruger

Jack Kruger has been a dedicated member of the Canadian Coast Guard Auxiliary for more than a decade and his accomplishments in the Search and Rescue (SAR) program have not gone unnoticed.

Jack's commitment to SAR is reflected in his successful command and control of incidents throughout the Nunavut and Northwest Territories. Indeed, improvements in SAR response capability demonstrated by the Central and Arctic Region's Coast Guard Auxiliary are the direct result of Jack's ability to galvanize search teams in remote areas of Canada's north.

Since becoming a CCGA member in 1997, Jack's "get it done" attitude has achieved results in countless other ways – many of which will only be known by Jack. His commitment to the Auxiliary is heartfelt; he expects no accolades – only to be called to assist when a SAR case occurs in the Arctic.

Environmental Response Services

Given the amounts of oil and other hazardous materials that are shipped to and from Canada by vessels operating in the North Atlantic, North Pacific, and Arctic Oceans, it is critical that the Canadian Coast Guard be an initial responder to all incidents, when required, in waters of Canadian interest. The Canadian Coast Guard is the lead federal agency for all ship-source and mystery pollution spills into the marine environment in waters under Canadian jurisdiction and for the support of other countries under international agreements. The objectives of the Environmental Response program are to minimize the environmental, economic, and public safety impacts of marine pollution incidents.

2008-2009 Accomplishments

Environmental Response Services

- Participated in a joint exercise in the Arctic, Operation NANOOK 2008, with National Defence and other government departments.
- Responded to 992 reported spills in Canadian waters between April and December 2008.
- Delivered Pollution Response Officer training courses to all required CCG Environmental Response personnel.
- Recovered $150,000 of the costs CCG incurred responding to marine pollution incidents.

Environmental Response (ER) Services contributes directly to a key government initiative, the Health of the Oceans, by ensuring that there is a coordinated and capable response to both ship-source and mystery-source spills into waters of Canadian interest. Effective environmental response requires significant resources, strong partnerships, careful contingency planning, and trained personnel. The program is also a major contributor to the federal marine response capacity.

What we do...

- Establish an appropriate and nationally consistent level of preparedness and response service in Canadian waters.
- Monitor and investigate all reports of marine pollution in Canada in conjunction with other federal departments and commercial partners. In this work, the program has a dual function:
  - Where the polluter has been identified and is willing and able to respond, the program advises the polluter of its responsibilities and, once satisfied with the polluter's intentions/plans, monitors the polluter's response and provides advice and guidance as required. This is what happens in the vast majority of marine pollution incidents.
  - In cases where the polluter is unknown, unwilling, or unable to respond, the program assumes the overall management of the incident.
- Maintain efficient communications with the program's partners, including Transport Canada and Environment Canada, to ensure community involvement and avoid duplication of service.
- Ensure Environmental Response program personnel are trained to function under a nationally consistent emergency management system which allows for the appropriate deployment of assets and resources and for the rapid and systemic escalation of responses up to the most remote parts of Canada.

The Environmental Response program is delivered with the support of...

- CCG Fleet, which operates CCG's vessels in support of Environmental Response operations.
- Environment Canada (EC) and Transport Canada (TC), through Memoranda of Understanding. EC provides environmental and scientific advice during a response to a marine pollution incident. TC provides the regulatory framework for the Canadian Marine Oil Spill Preparedness and Response Regime and provides technical advice with respect to vessels.
- Response Organizations, who may assist polluters in their response: CCG monitors this response.
- Ports and foreign governments, through the use of bilateral agreements, Memoranda of Understanding, and contingency plans, to ensure that all available resources can be used to mitigate the effects of pollution.
- International conventions to which Canada is a signatory state.

Looking Forward...

CCG is taking steps to meet the future needs of its Environmental Response program. Looking ahead, the program will review and update its current plans, Memoranda of Understanding, and agreements to meet the requirements imposed by recent changes to the *Canada Shipping Act, 2001* and the transition of CCG to a Special Operating Agency. Given the relatively small number of Environmental Response personnel who have specialized expertise related to Canada's Marine Oil Spill Preparedness and Response Regime, a human resources plan to transfer corporate knowledge from those nearing retirement is critical. The Environmental Response program continues to work with the Regime

regulator, Transport Canada, to assess and manage risk and implement strategic plans for the most effective deployment of resources.

Environmental Response Services		
Provides these services...	Measured this way...*	With these targets...
• CCG managed spill responses**	• Number of CCG responses to marine pollution incidents as On-Scene Commander (OSC) (South of 60)	• Benchmark = 600
	• Number of CCG responses to marine pollution incidents as On-Scene Commander (OSC) (Arctic Coverage Area; North of 60)	• Benchmark = 10
• Monitoring of private-sector response**	• Number of CCG responses to marine pollution incidents as Federal Monitoring Officer (FMO) posture	• Benchmark = 470
• Provision of expertise and resources to other government departments (OGDs) and organizations**	• Number of CCG responses as Resource Agency	• Benchmark = 140
To achieve this result...	Measured this way...*	With these targets...
• Reported cases of ship-source spills are addressed	• Percentage of ship-source spills where CCG acted as On-Scene Commander, Federal Monitoring Agency, or Resource Agency versus total number of reported ship-source spills	• 100%

* *These are the performance indicators in the CCG Performance Measurement Framework.*

** *In accordance with* Levels of Service and Service Standards *(www.ccg-gcc.gc.ca).*

Table 10: Environmental Response Services Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	969.6	425.4	**1,395.0**
Maritimes	1,005.0	284.8	**1,289.8**
Quebec	792.3	572.5	**1,364.8**
Central and Arctic*	1,268.7	536.5	**1,805.3**
Pacific	959.2	1,869.5	**2,828.7**
National Capital Region	1,194.1	775.5	**1,969.7**
National Programs**	-	31.5	**31.5**
Direct Program Total	**6,189.0**	**4,495.7**	**10,684.7**
Coast Guard Fleet Operational Readiness Allocation	565.9	212.1	**778.0**
Lifecycle Asset Management Services Allocation	509.3	238.5	**747.8**
Total Service Cost	**7,264.2**	**4,946.2**	**12,210.4**

* *Central and Arctic Region has a higher salary budget than the other regions because its organization is slightly larger to cover the services provided in the Arctic. This cost also includes isolated post allowances that are not paid in other regions.*

** *National Programs consist of $31.5K in research and development.*

Key Initiatives

Health of the Oceans

As part of Canada's commitment to conserve and protect Canadian waters, the Government of Canada, through Budget 2007, provided $2.2 million over three years to CCG to ensure Canada has the capacity to respond to oil spills in the Arctic. During 2008-2009, an evaluation of requirements and Request for Proposal for the purchase of equipment and first-response systems for the first phase ($1.25 million) was initiated. In 2009-2010, we will complete the purchase and distribution of Environmental Response equipment packages.

Commitment	Lead
2009-2010	
Complete acquisition and distribution of equipment packages.	DG, MS AC, C&A

Review of the National Environmental Response Strategy

Domestic and international obligations require Canada to maintain considerable preparedness capacity to respond to domestic and international marine pollution incidents, as well as to act as a strategic reserve for industry south of 60 degrees latitude. However, we must assess our current and future ability to deliver on these statutory obligations, especially where there are multiple spills or clean-up might be prolonged.

To ensure an effective, long-term Environmental Response Services program, we have conducted a review of our National Environmental Response Strategy. This Strategy captures all of the elements necessary for Environmental Response Services to develop, implement, and demonstrate the preparedness, response processes, and response procedures needed to respond to ship-source spills on waters over which Canada has jurisdiction.

During our review of the Strategy, we drafted revisions of the National Response Policy and National Response Plan. We subsequently identified ER equipment systems using current inventory and determined what components are required to ensure meeting capacity requirements.

The National Environmental Response Strategy remains a work in progress and is presently in draft stage. CCG has started an internal review of the draft Strategy and is planning to conduct broader discussions with our partners in the coming months to continue the update of the Strategy.

Progress was made in a couple of key areas in 2008-2009; competency profiles and a training strategy for ER management were completed. A senior managers training course was also developed.

In 2009-2010, work will continue on the National Environmental Response Strategy, with further consultation with our partners. Competency profiles and a training strategy for all positions with the Response Management System and all ER personnel will be developed. The senior managers training course will be delivered. A National Training Plan and a National Exercise Plan will be developed in consultation with regions and the CCG College. A tabletop spill exercise with federal and industry partners will be conducted as a precursor to an on-water exercise that will be undertaken the following year.

Commitment		Lead
2009-2010		
Consult partners on the National Environmental Response Strategy.	SDS	DG, MS
Draft a National Training Plan in consultation with CCG regions.		DG, MS
Design and conduct a Spill of National Significance tabletop exercise that includes federal and industry partners.		DG, MS
2010-2011		
Conduct and evaluate a Spill of National Significance deployment exercise that includes federal, industry, and international partners		DG, MS
Complete the revision of the National Environmental Response Strategy.		DG, MS

Brigadier General M. G. Zalinski

CCG is playing a key role in addressing an oil-pollution threat posed by the wreck of the United States vessel *Brigadier General M. G. Zalinski*. This vessel sank in the Grenville Channel in British Columbia in September 1946, entombing a cargo of munitions and an estimated 700 tonnes of fuel. The wreck, which lay largely forgotten, began leaking the fuel in 2003.

Following assessment of the situation and the development of an action plan during 2008-2009, all of the action plan components were refined and costed. During 2009-2010, we will seek to identify a funding source for the operational costs.

Commitment	Lead
2009-2010	
Develop an oil removal operation funding proposal.	DG, MS
2010-2011	
Implement the action plan, subject to funding availability.	DG, MS

Environmental Response Services Technical Training

In 2008-2009, the ER technical training strategy was partially drafted. However, further details need to be developed. The strategy will address regulatory, operational, and maintenance (refresher) requirements in the context of continuous learning and the flexible delivery of training. The training strategy awaits the development of competency profiles. When these are completed in 2009-2010, the ER technical training strategy will be finalized.

Commitment	Lead
2009-2010	
Finalize and implement a framework and strategy for technical training.	DG, MS

Reinvestment in the Asset Base

Environmental Response Services capital projects for 2009-2010 focus on investing in ER equipment for the Arctic. We expect to spend $1.76 million on these projects in 2009-2010. For a full description and a complete list of projects, see Annex A.

Maritime Security

The Coast Guard is an important part of Canada's maritime security efforts. The Government relies on strong interagency cooperation to ensure the security of Canada's waters. The Coast Guard is mandated by the Oceans Act to provide support to other departments. It is through the provision of shore-based and on-water assets, maritime domain information, and extensive maritime expertise that the Coast Guard supports other departments in delivering their security mandates.

In all activities, the overarching objective is to position CCG as a value-added and proactive partner in the delivery of multi-agency solutions in the enhancement of Canada's national security.

2008-2009 Accomplishments

Maritime Security

- Operationalized CCG's National Long Range Identification and Tracking System Data Centre and tracking of domestic and foreign Safety of Life at Sea Convention class vessels has begun, with the international system expected to be fully operational by the end of July 2009. The delivery of Automatic Identification System equipment is on schedule and installation is underway, with full installation anticipated for March 2010.
- Provided a proactive contribution to the refinement of the interagency Marine Security Operations Centres (MSOCs) concept of operations for the Halifax and Esquimalt MSOCs.
- Assumed an integral role in the establishment of the RCMP led St. Lawrence – Great Lakes Marine Security Operations Centres.

What we do...

In support of national security, Coast Guard is committed to:

- Collaborating with and enhancing working relationships with other agencies and departments in support of maritime and national security operations as well as policy and regulatory development. CCG participates in the Interdepartmental Marine Security Working Group, led by Transport Canada, that coordinates maritime security policy across the federal government in support of the Government of Canada multi-agency approach to maritime security.
- Providing a valuable contribution to Canada's maritime domain awareness through the sharing of information collected by Marine Communications and Traffic Services including Automatic Identification System data, the Long Range Identification and Tracking System and the CCG on-water Fleet presence on all coasts;
- Supporting on-water enforcement and responsiveness by providing well-equipped crews and vessels on an ongoing basis, in the case of the RCMP / CCG Marine Security Enforcement Teams, and on a contingency event basis; and
- Proactively participating in the Canadian Forces led coastal Marine Security Operations Centres and the RCMP led Great Lakes – St. Lawrence Seaway Marine Security Operations Centre.

The Maritime Security program is delivered with the support of...

- Headquarters and regional Fleet organizations, Maritime Services and Integrated Technical Services Directorates, as well as with the support of experts in DFO Conservation & Protection and Science in a collaborative effort to enhance the departmental contribution to Canada's national security.
- Canada's intelligence and enforcement communities including the Canadian Forces, RCMP, Department of Public Safety, Transport Canada and Canada Border Services Agency among others.

Looking Forward...

With a renewed emphasis on its support role, the Canadian Coast Guard will continue to assess the implications of a shift from a solely maritime safety orientation to a culture that is influenced by both safety and national security considerations.

Public policy issues, in particular information sharing, will be a significant consideration for maritime security projects such as the multi-agency Marine Security Operations Centres. Future CCG information system requirements will need to be informed by maritime and national security demands. There will be a demand for enhanced domain awareness and CCG is well-positioned to provide value-added maritime vessel data including Arctic vessel traffic information.

CCG security partners will continue to rely on CCG, as operator of the Government of Canada civilian fleet, to deliver the on-water portion of their security mandates. The CCG Fleet will need to balance these demands with the requirement to maintain asset utilization efficiency and the safety of personnel.

The maritime security activity within Coast Guard is a compilation of initiatives aimed at providing value-added service solutions to various government departments and agencies that have enforcement and intelligence mandates in the

maritime domain. Its success is dependent on communication and information sharing among CCG and the federal intelligence and enforcement communities as well as among the CCG maritime security group, headquarters staff, and the regions responsible for delivering on Coast Guard maritime security commitments.

Maritime Security		
Provides these services...	Measured this way...*	With these targets...
• Provision of CCG maritime traffic information to Marine Security Operations Centres	• Reliability of CCG maritime vessel traffic information for usage at Marine Security Operations Centres (proportion of year information is fully available)	• 99.7%
• Effective and efficient provision of CCG fleet services for security purposes	• Percentage of service delivered versus service planned (active vessels)	• 100%
To achieve this result...	**Measured this way...***	**With these targets...**
• Enhanced maritime domain awareness	• To be determined (the Interdepartmental Marine Security Working Group is developing indicators as part of a new horizontal performance framework)	• To be determined
• Enhanced security-related presence on Canadian waters	• TBD Horizontal Initiative: Being developed with RCMP	• To be determined

* *These are the performance indicators in the CCG Performance Measurement Framework.*

Table 11: Maritime Security Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	-	593.9	**593.9**
Maritimes	-	2.0	**2.0**
Quebec	1,157.5	936.6	**2,094.1**
Central and Arctic	1,519.6	1,784.6	**3,304.2**
Pacific	-	591.8	**591.8**
National Capital Region*	538.0	146.1	**684.0**
National Programs**	678.3	1,409.4	**2,087.7**
Direct Program Total	**3,893.4**	**5,464.4**	**9,357.7**
Coast Guard Fleet Operational Readiness Allocation	9,806.4	3,674.8	**13,481.2**
Lifecycle Asset Management Services Allocation	1,921.5	899.7	**2,821.2**
Total Service Cost	**15,621.2**	**10,038.8**	**25,660.0**

* *Maritime Security is managed nationally from the NCR region.*

** *National Programs consist of $2,087.7K for Marine Security Operations Centres (MSOCs).*

Key Initiatives

Marine Security Enforcement Team

A key aspect of the our increased role in supporting the federal maritime security agenda is the ongoing development of the joint RCMP/CCG Marine Security Enforcement Team (MSET) program in the St. Lawrence – Great Lakes region. The program characterizes Canada's multi-agency approach to maritime security by leveraging existing departmental capabilities to collectively and efficiently achieve a national security objective.

Currently, there are four Coast Guard MSET vessels. Law Enforcement Familiarization Training is provided to all crew members and specific equipment has been installed aboard vessels tasked to assist in law enforcement operations. We will continue to critically assess our MSET role and undertake the planning needed to efficiently address any personnel or infrastructure issues.

We will also continue to work with RCMP and DFO Conservation and Protection personnel to identify the hazards inherent in on-water enforcement operations. This will allow us to review and adjust our procedures and practices to ensure the greatest safety possible for CCG personnel and partner agencies.

Marine Security Operations Centres

DFO/CCG will continue to proactively participate in the multi-departmental Marine Security Operations Centres initiatives. The Canadian Forces leads this initiative on the coasts while the RCMP provides the lead in the St. Lawrence Seaway - Great Lakes area. DFO contributes significant data on maritime traffic and provides analysis of this data to support the enhancement of maritime domain awareness on Canada's three coasts and in the St. Lawrence Seaway - Great Lakes area.

The RCMP-led St. Lawrence Seaway - Great Lakes MSOC initiative completed its development phase on March 31, 2008. Budget 2008 provided funding for the establishment of a permanent MSOC in the Seaway - Great Lakes region.

The classification and staffing of Coast Guard positions in both the Coastal and Great Lakes Saint Lawrence Seaway MSOCs will be a priority in the coming years. Following the classification of proposed positions, the staffing process will begin in 2009 and continue into 2010. The goal is to place CCG MSOC personnel in accordance with the interim operating capacities established for the Centres.

Automatic Identification System/Long Range Identification and Tracking System

The Automatic Identification System (AIS) is a key CCG contribution to enhanced maritime security in and approaching Canadian waters. The system will enhance vessel surveillance, including near-real-time identification of vessels operating up to 40 nautical miles from Canada's shores. AIS will be implemented in sites that allow maximum coverage of the coasts and entrances to Canada, the St. Lawrence River, and the Great Lakes.

AIS will be supplemented by the Long Range Identification and Tracking (LRIT) system. LRIT is an integral part of the International Maritime Organization's (IMO) efforts to further enhance maritime security. Canada, through CCG, is leading the development and implementation of the international LRIT system. Using satellite technology, LRIT will allow for the tracking of Safety of Life at Sea Convention (SOLAS) class vessels entering Canada and of Canadian SOLAS class vessels operating internationally.

With LRIT, Canada will be able to identify and track an estimated additional 1,000 ships a day. This data will significantly enhance Canada's maritime domain awareness. LRIT will also benefit search and rescue by identifying vessels of opportunity in the area of a vessel in distress. LRIT was launched internationally in January 2009 and will be fully operational by the end of fiscal year 2009-2010.

Implementation of AIS and LRIT is on track. Treasury Board approval for Phase 2 of the AIS project included a complete operational system delivery by 2009-2010. Delivery of AIS equipment and Information Technology equipment to the regions is underway. AIS Critical Design Review was completed in January 2009 with the system Factory Acceptance Test completed in February 2009. All equipment is scheduled to be delivered by the beginning of April 2009 and all site installations are to be completed by the Fall of 2009, with full Vessel Traffic Management Information System (VTMIS) functionality planned for March 2010.

Commitment	Lead
2009-2010	
Install all required Automatic Identification System equipment and commission the fully operational system.	DG ITS, ACs

Reinvestment in the Asset Base

We are investing in critical surveillance and tracking systems in support of enhanced maritime security. We expect to spend $10.4 million on the AIS/LRIT project in 2009-2010, $25 million over the life of the project.

For a full description and a complete list of projects, see Annex A.

Fleet Operational Readiness

The Fleet Operational Readiness program involves the provision of safe, reliable, available, and operationally capable ships and helicopters with competent and professional crews ready to respond to on-water and marine-related needs. This Program Sub-activity involves fleet management, fleet acquisition, refit and maintenance, and the provision of fleet personnel. Through Fleet Operational Readiness, the Agency will ensure that the Government of Canada's civilian fleet meets the current and future needs of Canadians and the Government of Canada.

In addition to supporting most Coast Guard programs, as well as the Science and Fisheries Enforcement programs of DFO, the CCG fleet delivers civilian marine services on behalf of other federal government departments or in support of the maritime priorities of other federal agencies and organizations. Such clients include Department of National Defence, Environment Canada, the RCMP, the Department of Foreign Affairs, Transport Canada, Natural Resources Canada, and the Natural Sciences and Engineering Research Council of Canada. Detailed performance information is published annually in the CCG Fleet Annual Report.

2008-2009 Accomplishments

Fleet Operational Readiness

- Implemented mission readiness for the Regional Operations Centres and the National Co-ordination Centre.
- Implemented an improved Service Level Agreement with DFO Science and Fisheries Aquaculture Management.

L'Acadien II

- Accepted the recommendations of Rear Admiral Roger Girouard's independent report and those resulting from investigations conducted by the Transportation Safety Board, the RCMP and the Department of National Defence.
- Appointed a dedicated team led by a senior CCG Officer to integrate the recommendations of all investigations into a single Action Plan and report regularly to the Minister of Fisheries and Oceans (see page 50 for details).

Improvements in Fleet Management

- Completed development of the remaining elements of the Fleet Financial Framework.
- Completed a Fleet Fuel Management Policy.
- Completed the requirements analysis for the upgrade of the Fleet Activity Information System.
- Issued standard maintenance plans for ships' systems and a standard set of refit specifications for Type 1100 vessels.

Coast Guard Fleet Human Resources Initiatives

- Launched a Fleet Human Resources Development Program, made up of initiatives to bolster career development and knowledge transfer.

Coast Guard Fleet Operational Readiness

Provides these services...	Measured this way...*	With these targets...
Operational Fleet Days delivered for: • delivery of CCG marine services; • DFO Science and Conservation and Protection Programs; • Other federal government needs	• Total number of fleet operational days • Total number of fleet operational days for CCG • Total number of fleet operational days for DFO Science • Total number of fleet operational days for DFO Conservation and Protection • Total number of fleet operational days for OGDs • Total number of fleet operational days for the vessels supporting the joint RCMP / CCG Marine Security Enforcement Teams program and any other vessels delivering maritime security support	• As set out in the Service Level Agreements

To achieve this result...	Measured this way...*	With these targets...
• Total number of fleet operational days for the vessels supporting the joint RCMP / CCG Marine Security Enforcement Teams program and any other vessels delivering maritime security support	• Percentage of service delivered vs service planned for all programs • Percentage of service delivered vs service planned for CCG Programs • Percentage of service delivered vs service planned for DFO Science • Percentage of service delivered vs service planned for DFO Conservation and Protection • Percentage of service delivered vs service planned for GOC Programs • Number of hazardous occurrences	• 100% (with a tolerance zone of 10%) for 2008
• Re-supply of Northern communities for which there is no commercial service	• Percentage of CCG northern re-supply cargo (in metric tonnes) delivered compared to plan	• Deliver 100% of requested cargo as per agreements with Nunavut and Environment Canada

* *These are the performance indicators in the CCG Performance Measurement Framework.*

Figure 3: Planned Service by Client, 2009-2010 (in operational days)*

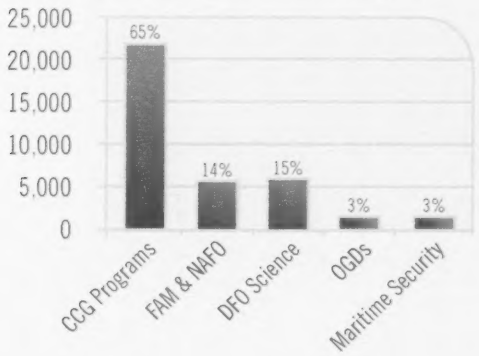


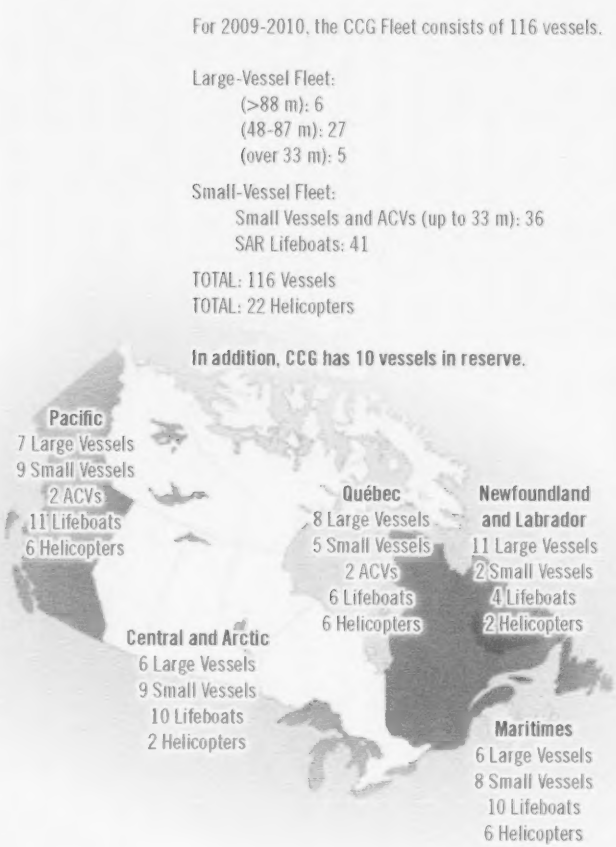
Table 12: Fleet Operational Readiness Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total*
Newfoundland and Labrador	43,802.1	15,223.7	**59,025.8**
Maritimes	31,616.4	10,212.1	**41,828.5**
Quebec	28,210.1	8,735.5	**36,945.6**
Central and Arctic	18,712.3	4,297.7	**23,009.9**
Pacific	34,664.8	11,241.4	**45,906.2**
National Capital Region	9,031.1	10,072.3	**19,103.4**
National Programs**	-	2,436.5	**2,436.5**
Direct Program Total	**166,036.8**	**62,219.2**	**228,255.9**

* *Includes all ship costs, excluding fuel.*

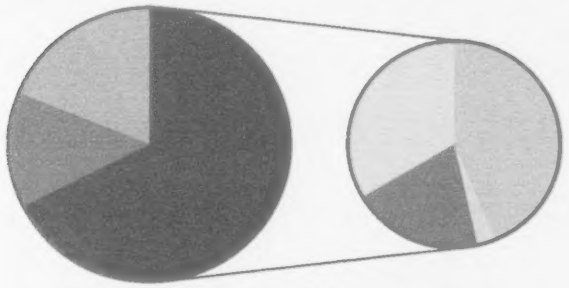
** *National Programs consist of $2,436.5K for national expenditures related to the helicopter program.*

Figure 4: National Distribution of Vessels and Helicopters, 2008-2009



The bulk of vessel time goes to programs for which Coast Guard is responsible. However, the fleet provides direct service to programs related to Science, to Fisheries and Aquaculture Management (FAM), and to the Northwest Atlantic Fisheries Organization (NAFO). The fleet also provides support to various other government departments (OGDs).

Figure 5: Planned Vessel Costs by Program, 2009-2010



67.6%	CCG Programs	27.9%	SAR/ER
15.5%	DFO Science	3.0%	Maritime Security
10.1%	FAM/NAFO	12.4%	Aids to Navigation
6.7%	OGDs	0.3%	MCTS
		24.2%	Icebreaking

Science

In 2009-2010, we plan to provide 3802 operational days of vessel time and over 230 hours of helicopter time to DFO Science. However, our fleet also services the broader government science agenda, and additional 720 operational days are planned for allocation among various clients and special initiatives.

The fleet's science clients include the DFO Science Program, the Canadian Hydrographic Service (CHS), Environment Canada, Natural Resources Canada (NRCan), and research supported by the Natural Sciences and Engineering Research Council of Canada (NSERC).

While science-related activities are conducted on many of our multi-taskable vessels, 17 vessels in the fleet are dedicated solely to the scientific endeavours of DFO and other organizations.

United Nations Convention on the Law of the Sea

We continue to provide icebreaker support to governmental science priorities related to Canada's obligations regarding seabed mapping associated with the United Nations Convention on the Law of the Sea (UNCLOS). This, along with continued icebreaker support to Arctic marine research under the International Polar Year, (which will end in 2009-2010), has been a rare opportunity for international cooperation in scientific research in the Arctic and Antarctic regions.

Fisheries and Aquaculture Management – Conservation and Protection

Northwest Atlantic Fisheries Organization

Canada has the right and responsibility to monitor and inspect the vessels of other state parties to ensure compliance with the rules of fisheries conventions of which we are a member, such as Northwest Atlantic Fisheries Organization. Operating mainly from CCG vessels, fishery officers acting as NAFO inspectors carry out inspections of fishing activities in the NAFO Regulatory Area.

Seal Harvest

While CCG has in the past provided services in support of the annual seal harvest, this fiscal year marks the third year this requirement has been incorporated into the National Fleet Operations Plan. Dedicated support has been planned for April 2009 and March 2010. Monitoring of the annual seal harvest is normally supported by CCG icebreakers and helicopters in fishing zones 4S/4T/4R (Gulf), as well as southwestern 2J and northwestern 3K (the Front).

Fisheries Enforcement

Conservation and protection activities are designed to ensure compliance with the legislation, policies, and fishing plans relating to the conservation and sustainable use of the fisheries resource. Patrol vessels are required to patrol closed and boundary areas, as well as to conduct inspections at sea to ensure compliance with the regulations designed to ensure an orderly fishery. In the Pacific Region, CCG and Fisheries and Aquaculture Management are discussing whether to maintain or modify the Marine Enforcement Officer (MEO) program, with a decision expected during 2009-2010. Ab initio training of Ships' Officers for the MEO role would require financial support from national Conservation and Protection, and Fleet would have to provide relief officers to replace those on training.

Key Initiatives

2010 Olympics

The Coast Guard will play a support role to the Department of National Defence and the Royal Canadian Mounted Police for security at the 2010 Olympic Games in Vancouver. CCG has funded a full-time Liaison Officer (LO) who represents DFO and CCG at all interdepartmental working meetings in Vancouver. This LO will be situated in the Olympic Games Marine Operations Centre (OMOC) during exercises and during the Games. In terms of on-water operations, CCG will

be supporting the RCMP with one vessel for maritime security purposes for the duration of the Games and will be placing special navigation buoys to delimit various on-water control zones. Other support will be provided on a cost-recovery basis at the request of our partners. All regular operations will continue in the Pacific Region.

L'Acadien II Action Plan

On March 29th, 2008, the fishing vessel L'Acadien II capsized while under tow by the CCGS *Sir William Alexander*. Of the six crew members, two were rescued and four lost their lives, one of which has not been found. To respond to this tragic accident, several investigations were undertaken resulting in reports by the following:

- The Transportation Safety Board (TSB), to determine the cause of the incident and any factors that may have contributed to it;
- The Royal Canadian Mounted Police (RCMP), to determine if any criminal offences had occurred (the RCMP concluded that no criminal investigation was warranted);
- Rear-Admiral Roger Girouard (retired), appointed by the Minister of Fisheries and Oceans to independently determine whether CCG policies and procedures had been followed and whether they were adequate; and
- Department of National Defence (at CCG's request) to prepare a Search and Rescue (SAR) Operation Report, to record the pertinent details of the incident.

Immediately following the release of these reports, a dedicated team led by a senior Coast Guard Officer analyzed each of these reports and integrated their recommendations into a single Action Plan. This was done in consultation with Transport Canada, the Department of National Defence and the Fisheries and Aquaculture Management Sector of DFO to ensure that all issues were considered. CCG is committed to addressing all recommendations as laid out in the Action Plan and will post regular progress reports alongside the full Action Plan on the CCG website.

Commissioner's Commendation Awarded to Tim Surette

On March 29, 2008, the fishing vessel L'Acadien II overturned while under tow by the CCGS *Sir William Alexander* off the east coast of Cape Breton Island, N.S. Four of the fishing vessel's crew members perished in the accident. In the aftermath of the tragedy, a number of Coast Guard employees were called upon to undertake a series of extraordinary measures; however, it was the courage and personal commitment of Tim Surette to the families of the lost seamen that set him apart from his colleagues.

Tim spent time with the family representatives both individually and as a group, as well as with local community leaders in the close-knit Magdalen Islands. His ability to connect with the grief-stricken relatives of the lost crew members in the emotionally charged time following the accident was appreciated by both the families and Tim's Coast Guard colleagues alike.

Ongoing Improvements in Fleet Management

To sustain an operationally ready fleet capable of meeting service demands, Fleet management will continue to pursue internal efficiencies to optimize national consistency, organizational effectiveness, and linkages with regions and clients. With this in mind, the Coast Guard fleet will continue to examine how it conducts business and make the improvements needed to enhance service as part of the ongoing Service Level Agreement (SLA) pilot process. We will renew both our Integrated Investment Plan and our Fleet Renewal Plan to ensure that our capital planning remains aligned with operational needs.

CCG Fleet will continue to invest in the improvement of its Fleet Activity Information System (FAIS) and enhance its business rules to ensure the effective use of FAIS. The Fleet Activity Information System captures the actual activities of Fleet vessels on an hourly basis and provides information to all levels of management. The system is therefore critical for decision-making, planning, performance measurement, and reporting at all levels of management and to the public through the *Fleet Annual Report*.

Commitment		Lead
2009-2010		
Complete architecture design for Fleet Activity Information System (iFleet) upgrade project.	AG	DG, Fleet
Revise the Fleet Renewal Plan.		DG, Fleet
Publish and maintain an intranet-based Fleet Management E-Manual.		DG, Fleet
Finalize standardized crewing matrix predicated on competency (crewing) profiles.		DG, Fleet

Improved Maintenance of the Existing Fleet

Acquiring new vessels will take a number of years. In the meantime, the existing fleet must be kept as operationally ready as possible.

The 2007 Report of the Auditor General noted that progress in implementing lifecycle management has been slow and raised a number of issues regarding maintenance systems and procedures. The Auditor General also noted that maintenance failures on vessels were linked to a lack of maintenance documents.

2008-2009 Accomplishments

Improved Maintenance of the Existing Fleet

- Published standard maintenance plans for critical ships systems for the Type 1100 vessel.
- Assessed Radio Frequency Antenna Safety Issues related to Fleet vessels and mitigated issues through the communication of technical information and training.
- Continued the vessel condition assessment program for forecasting maintenance requirements. This has become a standard practice within CCG.

Following the Vessel Maintenance Management Report, an action plan has been developed to address the shortcomings highlighted in the report (see Priority 5 for more details).

We have been conducting vessel condition assessments so we can make better informed investment decisions, plans refits better, and minimize the effect on operations. This program has continued over this year and is being accepted as a standard operating practice.

During this year, building on the work completed on standardizing Type 1100 maintenance plans, we developed standard refit specifications for this class of vessel.

To continue with the standardization of maintenance practices and to build on the accomplishments of the past couple of years, we plan to implement the *Engineering and Maintenance Manual for Fleet Vessels* in 2009-2010. This, along with the many initiatives included in the Vessel Maintenance Management Review project, will enhance CCG vessel maintenance practices.

Commitment		Lead
2009-2010		
Implement the *Engineering and Maintenance Manual for Fleet Vessels.*	AG	ACs

Human Resources Initiatives

The continuing development of Fleet Operational Readiness includes a variety of initiatives designed to support the fleet's workforce. About 2,500 of our employees — more than 50% of our workforce — are seagoing personnel. They are supported by an additional 180 shore-based personnel. Ensuring the effective management of the fleet's human resources is as critical to our operations as the management of our vessels and other physical assets. As a matter of ongoing management, CCG will continue to build on the human resources initiatives related to the fleet announced in 2007-2008 and on the Fleet Human Resources Development Program launched in 2008-2009, further strengthening a fully integrated, national fleet.

As a special initiative spanning the next two fiscal years, CCG will develop more precise Bona Fide Occupational Requirements for vision for seagoing personnel and MCTS Officers, ensuring a balance between the needs of those with eyesight disabilities and the safety of all those within the working environment.

Commitment	Lead
2009-2010	
Initiate research on vision standards for seagoing personnel.	DG, Fleet
2010-2011	
Develop Bona Fide Occupational Requirements for vision for seagoing positions.	DG, Fleet

Commitment	Lead
2009-2010	
Develop a Ships' Crew Certification Program.	DG, Fleet
2010-2011	
Implement the Ships' Crew Certification Program.	DG, Fleet

Reinvestment in the Fleet Asset Base

In the past few years, the government has made significant investments in the fleet asset base. As we acquire new vessels, we continue to invest in our existing fleet to optimize its availability and reliability. Budget 2009 provided further support to the fleet asset base, providing $175M ($90M for 2009-2010; $85M for 2010-2011) for various capital projects that can start immediately as part of the Economic Action Plan. Including these projects, Fleet will be managing a total of 26 capital projects with a value of $173M in 2009-2010. Five other capital projects approved in principle, at a total cost of $11.6 million in 2009-2010, can start once funding is approved.

For a full description and a complete list of projects, see Annex A.

Lifecycle Asset Management Services

The Lifecycle Asset Management Services program involves the effective lifecycle management of the CCG asset base. The program provides lifecycle engineering, acquisition, maintenance, and disposal services in support of CCG's non-fleet assets and lifecycle engineering in support of CCG's fleet assets (with vessel acquisition and maintenance funded through the Fleet Operational Readiness program). The Lifecycle Asset Management Services program ensures that asset capability, reliability, availability, and value are satisfied at minimum lifecycle cost, thereby improving the efficiency of CCG program delivery to Canadians.

CCG manages physical assets with an estimated replacement value of $11.6 billion. This breaks down as follows:

- Fleet assets — estimated replacement value of $10 billion. This includes major vessels, small craft, and helicopters.
- Equipment and other moveable assets — estimated replacement value of $1.6 billion.

These assets range from large icebreakers and radio towers to electronic communication and navigation systems to small, handheld radios and fixed and floating aids to navigation.

Asset management services are delivered by over 950 engineers, technicians, technologists, trades people, managers, and support staff located in over 70 workshops and offices across five regions and at national headquarters.

Lifecycle Asset Management Services

Provides these services...	Measured this way...*	With these targets...
• CCG major capital Asset Acquisition	• Percentage of major capital projects completed on schedule	• 90%
• Fleet Renewal initiative Major CCG Fleet Asset Acquisition	• Percentage of Major Crown Projects completed on schedule, budget and performance	• 100%
• CCG Fleet Assets Maintenance	• Percentage of maintenance (by cost) that is unplanned (Fleet assets)	• 20-35%
• CCG MNS Assets Maintenance	• Percentage of maintenance (by cost) that is unplanned for CCG Aids to Navigation	• 25-40%
• CCG MCTS Assets Maintenance	• Percentage of maintenance (by cost) that is unplanned for CCG MCTS Assets	• 30-40%

To achieve this result...	Measured this way...*	With these targets...
• CCG Assets are available for intended purpose. CCG Assets are reliable	• Percentage of Asset Base Service Life Remaining – CCG Fleet Assets	• 40 to 60% (for 2015)
	• Percentage of Time CCG fleet assets are available (as influenced by Maintenance)	• 85%
	• Re-investment rate into CCG Fleet Asset base (rolling three year average)	• 4%
	• Re-investment rate into CCG Aids to Navigation Asset base (rolling three year average)	• 7%
	• Re-investment rate into CCG Marine Communications and Traffic Services (MCTS) Asset base (rolling three year average)	• 5%

* *These are the performance indicators in the CCG Performance Measurement Framework.*

Table 13: Lifecycle Asset Management Services Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	8,975.6	4,329.0	**13,304.5**
Maritimes	10,992.3	4,069.0	**15,061.3**
Quebec	10,475.7	6,023.6	**16,499.3**
Central and Arctic	10,123.5	3,278.4	**13,401.9**
Pacific	11,561.7	4,183.7	**15,745.4**
National Capital Region*	7,043.9	5,821.9	**12,865.8**
National Programs	-	-	-
Direct Program Total	**59,172.8**	**27,705.5**	**86,878.3**

* *The National Capital Region is responsible for the National Engineering function, as well as the lifecycle management of several nationally implemented CCG information systems.*

Key Initiatives

Improved Maintenance of the Existing Fleet

See the section Coast Guard Fleet Operational Readiness, on page 47, for further details on improving the maintenance of the existing Fleet.

Asset Management System

We will continue to improve our processes and documentation to enhance the maintainability and to minimize the lifecycle cost of our assets.

The Asset Management System (AMS), which is the maintenance management system for CCG's Shore and Fleet assets, was deployed to 12 CCG vessels last year. During 2009-2010 it is expected that another 24 vessels, for a total of 36 vessels, will have fully populated and operating software. Also a ship to shore communications tool will be established in order to provide access to shore based regional and HQ personnel with access to the individual ship's data base.

Commitment		Lead
2009-2010		
Install Asset Management System complete with the *maintenance* management module onboard another 24 vessels.	AG	DG, ITS
2010-2011		
Install the *inventory* management module of Asset Management System onboard selected CCG Vessels.	AG	DG, ITS

Management of Information Technology Security (MITS)

During 2008-2009, we fulfilled our requirements under the Treasury Board Secretariat Management of Information Technology Security (MITS) Action Plan by:

- Achieving MITS compliant status;
- Establishing CCG IT security organization and structure and management controls; and
- Implementing network security according to Baseline Security Requirements for Network Security Zones in the Government of Canada from Communications Security Establishment.

Commitment	Lead
2009-2010	
Implement Management of Information Technology Security governance structure.	DG, ITS

Technical Solution Centres (Electronics)

As a part of ongoing continuous improvement, this year we will develop and implement a Technical Solution Centre (Electronics), complete with Service Level Agreements, at the national and regional levels.

Commitment	Lead
2009-2010	
Implement the Technical Solution Centres (Electronics).	ACs

Improved Maintenance of Existing Shore-based Infrastructure

As with our seagoing vessels, we need to continuously improve the maintenance of our shore-based physical assets in line with government expectations of asset capability, reliability, availability, and value at minimum lifecycle cost.

Following the successful publication of the *Engineering Maintenance Manual for Vessels*, we will develop and implement similar manuals for electronic assets (mainly MCTS-related assets) and for marine and civil infrastructure (mainly fixed and floating aids). Moreover, during the next couple of years, CCG will develop and implement standardized maintenance plans for shore-based assets.

Commitment		Lead
2009-2010		
Develop standardized engineering and maintenance manuals for selected CCG assets:	AG	
• Initiate the development an engineering and maintenance manual for marine and civil infrastructure, including communications and training materials.		DG, ITS
• Develop the strategy and procedures for the development of maintenance plans for shore-based infrastructure.		DG, ITS
2010-2011		
Further develop and implement standardized engineering and maintenance manuals for selected CCG assets:	AG	
• Publish and implement an engineering and maintenance manual for marine and civil infrastructure.		ACs
• Develop an engineering and maintenance manual for electronics and informatics, including communications and training materials.		DG, ITS
• Deliver standardized maintenance plans for shore-based infrastructure in accordance with strategy and procedures.		DG, ITS
2011-2012		
• Implement standardized maintenance plans for shore-based infrastructure in accordance with overall strategies and procedures.		ACs
• Ensure the implementation of the engineering and maintenance manual for electronics and informatics.		ACs

Human Resources Initiatives

Lifecycle Management System Guidance Manual

As CCG is committed to learning and development initiatives to ensure the availability of a skilled, well-trained, knowledgeable, and professional workforce, the initial training on the Lifecycle Management System (LCMS) guidance manual, started in 2008-2009, will be completed in 2009-2010. The purpose of this training is to enhance the understanding of Lifecycle Management (LCM) and its processes throughout the CCG workforce. The target audience for this one-day course is non-technical personnel, and the course is a condensed version of the LCMS training given to technical personnel over the past couple of years. Changes will be made to the course outline and content based on feedback and lessons learned in these training sessions.

Commitment	Lead
2009-2010	
Provide the required training on the Lifecycle Management System guidance manual.	ACs

The Engineering Community

CCG has committed to develop an Engineering Community Workforce Solution Action Plan in order to address the Engineering Community recruitment and retention issues. The objective of the Plan is to (a) ensure that valuable corporate knowledge is transferred, (b) further develop skill sets and allow existing engineering personnel to grow within the organization, and (c) recruit university-trained and marine engineers.

Commitment		Lead
2009-2010		
Conduct high level gap analysis related to engineering requirements.		DG, ITS DG, MCP
Develop an Engineering Community Workforce Solutions Action Plan.		DG, ITS DG, MCP
2010-2011		
Implement the Engineering Community Workforce Solutions Action Plan.	AG	DG, ITS DG, MCP

Marine Electronics Development Program

Based on a recent program review, we will look at ways to modify the Marine Electronics Development (MELDEV)[5] Program to ensure its ongoing success.

Commitment	Lead
2009-2010	
Review the Marine Electronics Development Program for areas of improvements.	DG, ITS

Reinvestment in the Asset Base

The average age and deteriorated physical condition of the asset base is diminishing our assets' reliability and performance. Operating and maintenance costs are in turn escalating. Effective cost management is further strained by the increasing need to manage both old and new assets, as old technologies are retained even while new technologies are adopted.

The goal of the Coast Guard reinvestment strategy is to refurbish and replace assets that have deteriorated over time. This reinvestment strategy is expected to bring our asset base back to its original baseline operating condition. Improving the condition of capital assets will have a direct impact on the quality and extent of CCG service delivery and the associated ongoing operating and maintenance costs.

We expect to spend $2.2 million in 2009-2010 on reinvestment in the CCG asset base. For a full description and a complete list of projects, see Annex A.

Commissioner's Commendations Awarded to Samir Gharbi and Bernard Doyon

Samir Gharbi, Project Engineer with our Integrated Technical Services group, recently developed a new squat prediction model that is a vast improvement in the accuracy and efficiency of the table currently in use. The table is used to assist in calculating vessel keel clearance.

Samir produced the new model after extensive on-water testing, in real conditions, and an in-depth analysis of an impressive amount of data. The results of his study will be used to develop both a new keel clearance calculation method and the tools for navigators and marine traffic regulation officers to use it.

The impact of Samir's project will be significant for navigation, marine safety and pollution prevention. His achievement is recognized as exceptional in a host of ways, including the scope of his on-water testing, the intelligence and innovation of the proposed modeling approach, the precision of his new model, and the scientific rigor with which he has proven it.

With public interest growing in protecting the marine environment, Integrated Technical Services Engineer Bernard Doyon turned his attention to developing an effective approach to recuperating hydrocarbons in ice-congested waters. With climate change, maritime traffic in those conditions is expected to increase in the coming years; his innovation is a timely one and will serve the Coast Guard and Canadians well.

Bernard's research project is both innovative and appears to be unique in the world. The high level of expertise, professionalism, devotion and determination he demonstrated with this project has positioned the Canadian Coast Guard advantageously as a world leader in the field of hydrocarbon recuperation in ice-congested waters.

5 This is an on-the-job training and development opportunity to help participants achieve technical proficiency.

Canadian Coast Guard College

The Canadian Coast Guard College is the main operational and technical training facility for CCG. Its mission is to train and develop marine professionals in support of CCG-mandated programs in marine safety, security, and environmental protection. As CCG's training centre of expertise, the College aims to deliver quality, bilingual maritime training and services.

2008-2009 Accomplishments

Canadian Coast Guard College

- Graduated 27 MCTS Officers.
- Provided training to 154 Electronic Technologists and Ship Radio Inspectors.
- Provided SAR training to 56 Coast Guard and DND personnel.
- Repositioned the CCG Officer Training Program recruitment initiative and initiated a strategy to collaborate closely with the regions to support and maximize results in this area.
- Held the first CCG College Open House in 15 years; the event attracted 1,000 visitors (local and out-of-province) and led to a positive national television news broadcast.
- Reestablished and staffed the position of Director of Studies with a senior Coast Guard Officer.

The College offers core national educational programs in four streams: CCG Officer Training Program (CCGOTP) and continued technical training for seagoing personnel, Marine Communications and Traffic Services (MCTS), Marine Maintenance and Equipment Training (MMET), and Rescue, Safety, and Environmental Response.

As a residential training facility, the College currently employs approximately 90 people, including 40 instructors and 46 full-time staff dedicated to academic support, general administration and management of the institution, hostelling, and property management.

Canadian Coast Guard College

Provides these services...	Measured this way...*	With these targets...
• Trained personnel	• Percentage of courses delivered over planned course delivery (CCGOTP)	• 100%
	• Percentage of courses delivered over planned course delivery (MCTS)	• 100%
	• Percentage of courses delivered over planned course delivery (SAR)	• 100%
	• Percentage of courses delivered over planned course delivery (ER)	• 100%
	• Percentage of courses delivered over planned course delivery (MMET)	• 100%
• Qualified personnel	• Number of students completing their courses and programs (CCGOTP)	• 29
	• Number of students completing their courses and programs (MCTS)	• 23
	• Number of students completing their courses and programs (SAR)	• 52
	• Number of students completing their courses and programs (ER)	• 26
	• Number of students completing their courses and programs (MMET)	• n/a

To achieve this result...	Measured this way...*	With these targets...
• Qualified marine professionals to deliver CCG programs	• Delivery of targets set out in CCG Strategic Human Resources Plan	• To be determined

* *These are the performance indicators in the CCG Performance Measurement Framework.*

Table 14: Number of Candidates at the Canadian Coast Guard College

Program		2009	2010	2011	2012
CCG Officer Training Program (CCGOTP)	Navigation*	0[6]	11	21	22
	Engineering*	14	12	7	14
Marine Communications and Traffic Services Officer (MCTSO)	English	14	14	15	11
	French	8	9	4	6
Marine Maintenance and Equipment Training (MMET) **		154	152	152	152
Rescue, Safety and Environmental Response (RSER)	Search and Rescue Training***	68	68	68	68
	Environmental Response***	48	48	48	48
Fleet Technical Training		TBD	TBD	TBD	TBD

* *Projected Number of Graduates*
** *Subject to change (increase or decrease), given enrolment and the financial and human resources available.*
*** *These numbers are based on the projected number of courses and number of seats per course.*

Table 15: Coast Guard College Resource Profile, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Canadian Coast Guard College	6,305.7	7,831.8	**14,137.6**
National Programs	-	-	-
Direct Program Total	**6,305.7**	**7,831.8**	**14,137.6**
Coast Guard Fleet Operational Readiness Allocation	-	-	-
Lifecycle Asset Management Services Allocation	133.1	62.3	**195.4**
Total Service Cost	**6,438.8**	**7,894.1**	**14,332.9**

Key Initiative

Canadian Coast Guard College Transformation Initiative

In support of improving the national consistency of human resources management, during 2008-2009 the College focused on developing a Transformation Plan. The Plan is intended as a blueprint for the College and as the multi-year framework within which course development, investment, and infrastructure decisions will be taken.

The Transformation Plan includes an organizational structure to better align the College curriculum with organizational needs. The Plan focuses on the provision of client-oriented, quality training delivered within available resources. This structure will improve the overall effectiveness and efficiency of the institution and ensure that employees and resources are focussed where they are needed most — in support of the delivery of high-quality CCG training programs.

Over the next several years, the College will implement the Transformation Plan. The main goal of transformation is the strategic repositioning of the College to respond to evolving CCG training needs and to support the national interest. Beginning in 2010, the CCGC will increase its annual intake of Officer Cadets from 48 to 64, each year.

The strength of the College will continue to be its professional and dedicated people, who have always been the cornerstone of the institution.

Commitment	Lead
2009-2010	
Finalize the College Transformation Plan.	ED, CCGC
2010-2011	
Increase Officer-Cadet intake at the CCG College to 64 Officer-Cadets per year beginning September 2010.	ED, CCGC

6 There was no Officer-Cadet intake in 2005. Accordingly, there were no Ships' Officer graduates in 2009.

International Activities

Much of what the CCG does has an international component. We work with organizations from other countries to advance common interests, participate in various international fora, provide expert advice on Coast Guard issues to governments of other countries, and share best practices with the United States Coast Guard and other similar agencies.

The following are just some of our international activities:

- We lead a multi-departmental team at the North Pacific Coast Guard Forum (NPCGF), a six-nation organization working to ensure safe and secure waters in the North Pacific region through enhanced multilateral information sharing. In 2009, Korea will host two meetings, namely the meeting of experts (where working groups discuss a range of practical issues), and the summit of principals (where the lead representatives of the six member countries review and endorse recommendations). As part of the practical work undertaken under the umbrella of this group, the USCG will host a joint major maritime exercise this year, in which the CCG will also participate. Canada will take its turn as host of the Forum in 2010 by holding the Experts' meeting in March and the Summit in September. Planning and preparations for hosting both these meetings are already under way.
- We lead a similar multi-departmental team at the North Atlantic Coast Guard Forum (NACGF), a 20-nation group of predominantly European Union nations that also seeks to achieve efficiencies in safety and security in the North Atlantic maritime region. In 2009, CCG will lead the Canadian delegation to the Experts' meeting and Summit hosted by Iceland. CCG will also participate in a joint search and rescue exercise off Iceland based on the scenario of a cruise ship accident and humanitarian assistance.
- We work regularly with international organizations such as the International Maritime Organization (IMO) and the International Association of Lighthouse Authorities (IALA) to develop rules, regulations, policy, and technology for safe and secure transportation on the world's waterways. Among other things, these organizations develop and recommend technical standards for aids to navigation and automated identification systems, areas that are essential to CCG's responsibilities and activities in Canada.
- In addition to their shared maritime interests, the CCG and USCG also share a number of clients and stakeholders and, to that end, perform joint exercises regularly each year to enhance their service delivery. We also hold a Canada-United States Coast Guard Summit annually to provide the national leadership necessary to guide this valuable partnership. Preparations for the 2009 Summit are under way, which the CCG will host in Quebec City.
- We host delegations from foreign Coast Guards as part of our commitment to sharing best practices. In 2009, for example, we hosted a delegation from the Malaysian Maritime Enforcement Agency.

2008-2009 Accomplishments

International Activities

- CCG led on behalf of the Government of Canada multi-departmental teams to the North Pacific Coast Guard Forum March Experts' meeting and September Summit meeting.
- CCG led on behalf of the Government of Canada multi-departmental teams to the North Atlantic Coast Guard Forum Experts' meeting in March and September Summit meeting.
- CCG attended the third Canada-United States Coast Summit in May hosted by the United States Coast Guard.
- CCG concluded a Memorandum of Understanding with the Korea Coast Guard to govern future exchanges of personnel between both coast guard agencies.
- CCG hosted visits by the Royal Danish Navy and the Malaysian Maritime Enforcement Agency.
- CCG participated in the annual Canada-US Joint Marine Pollution Contingency Plan and joint SAR exercises.

- We recently concluded a Memorandum of Understanding on Assignments with the Korean Coast Guard to promote greater cooperation and mutual understanding between our two Coast Guard agencies. CCG is currently hosting an officer of the Korea Coast Guard in our Pacific Region.

Commitment	Lead
2009-2010	
Host Canada-US Coast Guard Summit in Quebec City, Quebec	Commissioner
Host Experts' meeting of the North Pacific Coast Guard Forum in Victoria, British Columbia	AC, Pacific
2010-2011	
Host Summit of the North Pacific Coast Guard Forum in Vancouver, British Columbia	AC, Pacific

(5) FINANCIAL INFORMATION

Status of Financial Management Initiatives in the Coast Guard

In recent years, the Coast Guard has implemented a number of initiatives to improve financial planning, reporting and monitoring. The new financial management initiatives include:

- The implementation of Activity-based Management and Activity-based Budgeting which improves the link between our allocation decisions and Treasury Board's Management, Resources and Results Structure (MRRS);
- Revisions to our Program Activity Architecture that allows us to clearly quantify the cost of providing an operationally ready Vessel Fleet for Canada;
- More timely and proactive planning cycle which affords managers the ability to begin the year with a finalized budget allocation, thus improving transparency and accountability for results;
- Improving our Capital management process in order to better integrate our operational requirements with our capital investments.

Operating Environment

Like all organizations, the Coast Guard has had to adjust to overall economic trends and government-wide decisions. The most significant have been:

- The need, over the past 2-3 years, to reallocate approximately $11M internally to cover increased fuel costs. Indeed, last year fuel prices were so high that the Coast Guard had to secure $25M from the Treasury Board over and above its fuel budget, including the internal reallocation, to cover costs. However, given current fuel forecasts, it is expected that CCG will be able to manage within its base fuel budget for 2009-2010. The volatility of fuel prices remains a significant risk.
- For 2009-2010, there has been a modest decrease in the Coast Guard operating budget of approximately $1M. This is a continuation of government-wide budgetary reductions which stem from the Expenditure Review exercise outlined in Budget 2005. Individual federal departments were tasked to reduce expenditure as a result of improvements in operations and a rigorous assessment of the relevance and effectiveness of programs.
- The recent economic downturn has reduced commodity and labour costs that have taken some pressure off capital and vessel refit budgets.
- As the economy slows, it is widely expected that shipping in Canada will also diminish. This will negatively impact the amount of revenue we collect for our ice-breaking and maritime navigation services. Despite the falling revenue, we will still be required to maintain our advertised levels of service to Canadians. As a result, the decreased revenue will negatively impact our operating budget.

Coast Guard has been able to manage these adjustments without any noticeable reductions in advertised levels of service. As part of Federal Budget 2009, the Government introduced government-wide restraint measures for discretionary spending areas such as: travel, hospitality, conferences, and professional services. Coast Guard had previously adopted many of these measures as part of its budget planning to deal with some of the developments noted above.

Assets and Liabilities

With 11,500 assets worth $11.6 billion, CCG is a heavily asset-reliant and capital-intensive Agency which relies on a vast infrastructure to deliver on its program mandate. The overall asset base includes such assets as:

- Small, medium, and large aids to navigation;
- Communication systems and equipment;
- Helicopters;
- Vessels; and
- Waterways.

The replacement value of CCG's assets has increased from the previously reported amount of $5.6 billion in 2007-2008 to $11.6 billion in 2008-2009. The primary cause for this increase is due to a marked escalation in the replacement cost of new vessels. The realities of today's shipbuilding costs were incorporated into pricing analysis undertaken as part of the Fleet Renewal Plan which has extensively measured the cost to replace each of the essential fleet vessels. Also, as the Polar Icebreaker is expected to cost in the neighbourhood of $800M for a single unit, an $11.6 billion replacement of the entire fleet is likely a more substantive estimate than that which previously reported.

Although CCG's assets carry a replacement value of $11.6 billion, the depreciated book value of the entire asset base is $600M. This is the most resolute indication of the age of our deteriorating asset base. CCG's assets are divided into two categories for planning and management:

- Approximately $10 billion in Fleet assets with a net book value of $463 million; and
- $1.6 billion in Equipment and Other Moveable Assets with a net book value of $137M.

In recent years it has become apparent that the inadequate recapitalization of our Fleet assets would result in the eventual inability of CCG to sustain its required levels of service. As such, there have been a number of financial infusions in recent Federal Budgets, such as the Mid-Shore Patrol Vessels and Polar Icebreaker, which will ensure that the book value of our Fleet asset base increases with time.

Unfortunately, the pace of recapitalization for our shore-based assets has not kept up with that of our Fleet. This is despite of an annual funding increase of $47.3M which was received in 2003 through the National Capital Spending Plan. While there have been improvements, there is still a continued reliance on outdated and fully depreciated shore-based infrastructure as recapitalization has not kept up with the rate of depreciation. As such, the condition of our shore assets continues to deteriorate and technological advances have rendered much of our existing equipment obsolete and more costly to maintain.

In order to better communicate our asset management and investment planning picture in a more holistic and integrated manner, CCG has embarked upon an initiative to update its overall planning process for capital investments. The new Integrated Investment Planning process will ensure that our investment decisions are based on a full assessment of risk, priority and capability requirements.

Impact of Recent Funding Injections

As previously referenced, the last three Federal budgets have brought forth significant increases to our capital budget, resulting in supplementary Government investments in the Coast Guard of $1.7 billion since 2005.

The most recent capital infusion was a result of the Budget 2009 - Federal Economic Action Plan which will bring $175M to the Coast Guard between 2009-2010 and 2010-2011.

The additional funding for our Fleet assets will produce very tangible results for the programs we support and ensure that we are able to maintain the maritime service excellence that our clients rely upon.

Conclusion

The Coast Guard has implemented a number of financial management initiatives which have helped us organize our operations in a more business-like and rational manner. The improved financial management framework has helped us better communicate our capacity and funding deficiencies, resulting in significant infusions of capital funding. The new funding will help stabilize our Fleet infrastructure; however, it is becoming increasingly evident that our shore-based infrastructure should also be addressed in the near term.

CCG has taken several measures to ensure a more priority based allocation process, delivered through a strengthened planning, budgeting and reporting framework. This being said, we must continue to effectively manage our operating and investment budgets, ensuring that the most pertinent programs are properly funded. By continuing to improve our financial management processes, CCG will ensure that it remains strong now and into the future.

Table 16 : Derivation of 2009-2010 Budget Allocation

(Thousands of Dollars)	Salary	O&M	Sub-total	Capital	Vote-Netted Revenue	Contribu-tions	Total
2008-09 Total Budget	**303,194.0**	**195,083.4**	**498,277.4**	**198,372.5**	**(50,058.0)**	**4,881.0**	**651,472.9**
External Funding:							
Fuel Business Case	-	(25,000.0)	**(25,000.0)**	-	-	-	**(25,000.0)**
2008-09 Risk (08-09 ERC, Eff. Cut)	-	(10,227.2)	**(10,227.2)**	-	-	-	**(10,227.2)**
Science, FAM & NAFO Ships Funding	(36,496.7)	(18,790.0)	**(55,286.7)**	-	-	-	**(55,286.7)**
Real Property at College	-	(2,085.7)	**(2,085.7)**	-	-	-	**(2,085.7)**
NIF, Net	-	494.8	**494.8**	-	-	-	**494.8**
MSOC DND Sunset	(1,145.0)	(21.0)	**(1,166.0)**	-	-	-	**(1,166.0)**
IPY Sunset	-	(9,020.8)	**(9,020.8)**	-	-	-	**(9,020.8)**
Great Lakes MSET Sunset	(2,399.5)	(1,547.9)	**(3,947.4)**	-	-	-	**(3,947.4)**
RCMP Great Lakes MSOC 2009-10	678.3	1,409.5	**2,087.8**	-	-	-	**2,087.8**
Vote Conversions:							
Science, FAM & NAFO Refit Vote Conv.	-	(6,032.8)	**(6,032.8)**	-	-	-	**(6,032.8)**
DND MSOC From C&P	-	(508.2)	**(508.2)**	-	-	-	**(508.2)**
IMSO G&C	-	300.0	**300.0**	-	-	-	**300.0**
Temporary 08-09 Salary Conv.	(9,222.5)	11,067.0	**1,844.5**	-	-	-	**1,844.5**
Dalhousie University G&C Sunset	-	30.0	**30.0**	-	-	(30.0)	-
CCGA G&C	-	(187.0)	**(187.0)**	-	-	187.0	-
New Funding:							
Round 25 SO, EX & FI	4,363.6	-	**4,363.6**	-	-	-	**4,363.6**
MSPV Funding	2,083.0	7,098.8	**9,181.8**	27,166.7	-	-	**36,348.5**
Arctic Remission Order	-	-	-	-	100.0	-	**100.0**
Reprofiles & Funding Sunsets:							
MSPV Reprofile	-	-	-	(77,320.0)	-	-	**(77,320.0)**
AIS sunset	-	-	-	(1,745.6)	-	-	**(1,745.6)**
AIS ARLU Reprofile	-	-	-	4,735.5	-	-	**4,735.5**
ACV Reprofile	-	-	-	(5,725.8)	-	-	(5,725.8)
Carry-forward	-	(5,722.7)	**(5,722.7)**	-	-	-	(5,722.7)
Other	2.7	542.9	**545.6**	-	-	-	545.6
2009-10 Main Estimates	**261,057.9**	**136,883.1**	**397,941.0**	**145,483.3**	**(49,958.0)**	**5,038.0**	**498,504.3**
External Funding:							
Lay Day to Science	(1,127.6)	-	**(1,127.6)**	-	-	-	(1,127.6)
Lay Day to FAM	(699.0)	-	**(699.0)**	-	-	-	(699.0)
Science Fleet Funding	24,011.4	10,779.1	**34,790.5**	-	-	-	34,790.5
FAM Fleet Funding	11,946.9	7,045.5	**18,992.4**	-	-	-	18,992.4
NAFO Fleet Funding	4,564.3	2,401.3	**6,965.6**	-	-	-	6,965.6
Science Refit	-	4,050.0	**4,050.0**	-	-	-	4,050.0
FAM Refit	-	985.0	**985.0**	-	-	-	985.0
NAFO Refit	-	997.8	**997.8**	-	-	-	997.8
Economic Action Plan	-	-	-	90,000.0	-	-	90,000.0
PSAT (Sec. Tact. Comm. Trial) - Fleet	-	730.8	**730.8**	-	-	-	730.8
Salary / O&M Conversion	1,028.6	(1,234.6)	**(206.0)**	-	-	-	(206.0)
Real Property at College	-	2,085.7	**2,085.7**	-	-	-	2,085.7
College Minor Capital	-	362.0	**362.0**	-	-	-	362.0
Fiscal Frmk. Not Yet Appropriated	-	-	-	26,162.0	-	-	26,162.0
Anticipated Repro. of Fiscal Frmk.	-	-	-	(16,562.0)	-	-	(16,562.0)
Anticipated Carry Forward	-	5,003.2	**5,003.2**	11,322.7	-	-	16,325.9
Permanent Reductions:							
Efficiency Cut (Estimated)	-	(1,117.3)	**(1,117.3)**	-	-	-	(1,117.3)
2009-10 Budget Allocation	**300,782.5**	**168,971.6**	**469,754.1**	**256,406.0**	**(49,958.0)**	**5,038.0**	**681,240.1**

Table 17: Financial Allocations by PAA Sub-Activity, 2009-2010 (thousands of dollars)

PAA Sub-activity	Salary	Other Operations and Maintenance (O&M)	Total Operating	Major Capital	Grants and Contributions	Total Planned Spending**
Aids to Navigation	11,924.2	10,163.0	**22,087.2**	-	-	**22,087.2**
Waterways Management Services	2,911.6	7,133.9	**10,045.5**	-	-	**10,045.5**
Marine Communications and Traffic Services	32,495.7	7,904.9	**40,400.6**	-	-	**40,400.6**
Icebreaking Services	961.1	19,066.9	**20,028.0**	-	-	**20,028.0**
Search and Rescue Services	10,892.2	16,986.3	**27,878.5**	-	4,888.0	**32,766.5**
Environmental Response Services	6,181.0	4,495.7	**10,676.7**	-	150.0	**10,826.7**
Maritime Security	3,893.4	5,464.4	**9,357.7**	-	-	**9,357.7**
Coast Guard College	6,305.7	7,831.8	**14,137.6**	-	-	**14,137.6**
Fleet Operational Readiness	166,044.8	62,219.2	**228,263.9**	200,069.7	-	**428,333.6**
Lifecycle Asset Management Services	59,172.8	27,705.5	**86,878.3**	56,336.3	-	**143,214.6**
Total	**300,782.5**	**168,971.6**	**469,754.1**	**256,406.0**	**5,038.0**	**731,198.1**

* *O&M includes fuel for FAM, Science & NAFO*
** *Excludes Vote-Netted Revenue (VNR)*

Table 18: Financial Allocations by Region, 2009-2010 (thousands of dollars)

Region	Salary	O&M	Total
Newfoundland and Labrador	63,997.8	33,619.4	**97,617.3**
Maritimes	53,724.5	21,467.6	**75,192.1**
Quebec	49,558.4	27,986.5	**77,544.9**
Central and Arctic	38,979.2	16,692.9	**55,672.1**
Pacific	61,633.8	25,354.1	**86,987.9**
National Capital Region	31,735.4	29,145.6	**60,881.1**
National Programs	1,153.3	14,705.4	**15,858.7**
Direct Program Total	**300,782.5**	**168,971.6**	**469,754.1**

Table 19: Financial Allocations by Sub-activity by Region, 2009-2010 (thousands of dollars)

PAA Sub-activity	Newfoundland and Labrador	Maritimes	Québec	Central and Arctic	Pacific	National Capital Region	National Programs	Total
Aids to Navigation	4,895.6	2,789.9	1,837.3	2,166.9	6,636.0	3,637.2	124.4	**22,087.2**
Waterways Management Services	24.1	1,792.8	4,828.4	1,427.5	1,134.4	838.3	-	**10,045.5**
Marine Communications and Traffic Services	6,050.8	6,039.4	6,500.5	6,147.6	10,777.9	3,487.8	1,396.6	**40,400.6**
Icebreaking Services	3,699.5	1,752.0	3,890.5	221.8	576.3	877.5	9,010.4	**20,028.0**
Search and Rescue Services	8,628.2	4,636.4	3,584.4	4,187.0	2,791.3	3,279.7	771.6	**27,878.5**
Environmental Response Services	1,395.0	1,289.8	1,364.8	1,805.3	2,828.7	1,961.7	31.5	**10,676.7**
Maritime Security	593.9	2.0	2,094.1	3,304.2	591.8	684.0	2,087.7	**9,357.7**
Coast Guard College	-	-	-	-	-	14,137.6	-	**14,137.6**
Coast Guard Fleet Operational Readiness	59,025.8	41,828.5	36,945.6	23,009.9	45,906.2	19,111.4	2,436.5	**228,263.9**
Lifecycle Asset Management Services	13,304.5	15,061.3	16,499.3	13,401.9	15,745.4	12,865.8	-	**86,878.3**
Total	**97,617.3**	**75,192.1**	**77,544.9**	**55,672.1**	**86,987.9**	**60,881.1**	**15,858.7**	**469,754.1**

Table 20: National Programs by Sub-activity, 2009-2010 (thousands of dollars)

PAA Sub-activity	Ice Reconnaissance	Helicopters	Automatic Identification System	Marine Security Operations Centres	New Initiatives Fund	Research and Development	Total
Aids to Navigation	-	-	-	-	-	124.4	**124.4**
Waterways Management Services	-	-	-	-	-	-	**-**
Marine Communications and Traffic Services	-	-	1,343.3	-	-	53.3	**1,396.6**
Icebreaking Services	8,900.0	-	-	-	-	110.4	**9,010.4**
Search and Rescue Services	-	-	-	-	733.2	38.4	**771.6**
Environmental Response Services	-	-	-	-	-	31.5	**31.5**
Maritime Security	-	-	-	2,087.7	-	-	**2,087.7**
Coast Guard College	-	-	-	-	-	-	**-**
Coast Guard Fleet Operational Readiness	-	2,436.5	-	-	-	-	**2,436.5**
Lifecycle Asset Management Services	-	-	-	-	-	-	**-**
Total	**8,900.0**	**2,436.5**	**1,343.3**	**2,087.7**	**733.2**	**358.0**	**15,858.7**

Table 21: CCG Vote-Netted Revenue Targets by PAA Sub-activity, 2009-2010 (thousands of dollars)

PAA Sub-activity	Marine Navigation Services Fees	Icebreaking Services Fees	Marine Dredging Fee	CCG College Fees	Other	Total
Aids to Navigation	(4,728.0)	-	-	-	-	**(4,728.0)**
Waterways Management Services	-	-	(4,600.0)	-	-	**(4,600.0)**
Icebreaking Services	-	(2,426.1)	-	-	-	**(2,426.1)**
Search and Rescue Services	-	-	-	-	(75.0)	**(75.0)**
Marine Communications and Traffic Services	-	-	-	-	(250.0)	**(250.0)**
Coast Guard College	-	-	-	(3,700.0)	-	**(3,700.0)**
Fleet Operational Readiness	(12,609.5)	(9,217.2)	-	-	-	**(21,826.7)**
Lifecycle Asset Management Services	(10,321.5)	(2,030.7)	-	-	-	**(12,352.1)**
Total	**(27,659.0)**	**(13,674.0)**	**(4,600.0)**	**(3,700.0)**	**(325.0)**	**(49,958.0)**

Notes:

1) Includes $100K reduction for 2009-10 related to temporary Arctic MNSF Remission Order

2) Contributions from the St. Lawrence Seaway Management Corporation (SLSMC) to Fisheries and Oceans Canada for the provision of CCG aids to navigation within the Seaway are not collected through any of the fees identified in this table. Rather, SLSMC contributions are attributed to the government's Consolidated Revenue Fund and are not re-spendable by the Department.

3) In 2009-2010 CCG will adjust the revenue target for the CCG College down by $2,000K. This will result in an overall revenue target reduction for CCG of an equal amount.

Table 22: CCG Major Capital Budget & Planned Expenditure – Overview (thousands of dollars)

The following table summarizes Coast Guard's planned Major Capital spending over a five-year period. The planned expenditures are organized by major investment category in order to outline the distribution of CCG's long term major capital spending. (For additional information on individual capital projects see Annex A: CCG Capital Expenditures)

	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
BUDGET OVERVIEW						
A-Base Budget	129,400.0	129,400.0	129,400.0	129,400.0	129,400.0	647,000.0
Major Crown Projects (MSPV only)	53,701.0	24,998.0	59,629.0	11,000.0	-	149,328.0
Temporary Funding (AIS, HOTO)	9,617.0	-	-	-	-	9,617.0
Carry-Forward	11,288.0	-	-	-	-	11,288.0
Economic Action Plan	90,000.0	85,000.0	-	-	-	175,000.0
TOTAL BUDGET (CURRENT)	294,006.0	239,398.0	189,029.0	140,400.0	129,400.0	992,232.0
Reprofile (MSPV) (See Note 1)	(47,201.0)	8,490.0	-	51,371.0	29,000.0	41,660.0
Fiscal Framework not yet Appropriated	26,162.0	98,721.0	329,036.0	314,092.0	151,690.0	919,700.0
Reprofile of Fiscal Framework funding (if received)	(16,562.0)	16,562.0	-	-	-	-
TOTAL BUDGET (PLANNED)	**256,405.0**	**363,170.0**	**518,065.0**	**505,863.0**	**310,090.0**	**1,953,592.0**
PLANNED SPENDING						
VESSEL FLEET						
Small Vessel Replacement (Investment)	10,635.0	22,886.0	22,211.0	20,201.0	20,500.0	96,433.0
Economic Action Plan	4,000.0	20,000.0	-	-	-	24,000.0
A-base	6,635.0	2,886.0	22,211.0	20,201.0	20,500.0	72,433.0

Table 22 continued on next page...

BUDGET OVERVIEW	2009-10	2010-11	2011-12	2012-13	2013-14	TOTAL
Vessel Life Extension (Investment)	**50,065.0**	**24,382.0**	**-**	**-**	**-**	**74,447.0**
Economic Action Plan	50,000.0	24,000.0	-	-	-	74,000.0
A-base	65.0	382.0	-	-	-	447.0
Small Craft (Investment)	**13,576.0**	**12,000.0**	**5,000.0**	**5,000.0**	**5,000.0**	**40,576.0**
Economic Action Plan	7,000.0	7,000.0	-	-	-	14,000.0
A-base	6,576.0	5,000.0	5,000.0	5,000.0	5,000.0	26,576.0
Vessel Refit / Refurbishment	**75,098.0**	**75,400.0**	**57,400.0**	**60,400.0**	**60,400.0**	**328,698.0**
Economic Action Plan	19,000.0	19,000.0	-	-	-	38,000.0
A-base	56,098.0	56,400.0	57,400.0	60,400.0	60,400.0	290,698.0
Helicopter	**10,150.0**	**5,600.0**	**5,600.0**	**5,600.0**	**5,600.0**	**32,550.0**
Refit	6,150.0	5,600.0	5,600.0	5,600.0	5,600.0	28,550.0
Helo Spare 212	4,000.0	-	-	-	-	4,000.0
Vessel System / Tech. Upgrades	**8,410.0**	**8,436.0**	**-**	**-**	**-**	**16,846.0**
Investment	1,533.0	-	-	-	-	1,533.0
Refurbishment	6,877.0	8,436.0	-	-	-	15,313.0
TOTAL VESSEL FLEET	**167,935.0**	**148,704.0**	**90,211.0**	**91,201.0**	**91,500.0**	**589,551.0**
PROCUREMENT OF MAJOR VESSELS						
Vessel Procurement Costs	11,013.0	127,071.0	361,665.0	351,713.0	158,190.0	1,009,652.0
Project Management Costs	8,037.0	16,200.0	21,000.0	19,650.0	16,500.0	81,387.0
Core Capacity	5,050.0	5,500.0	6,000.0	5,100.0	6,000.0	27,651.0
Economic Action Plan	8,000 .0	12,000.0	-	-	-	20,000.0
TOTAL PROCUREMENT OF MAJOR VESSELS	**32,101.0**	**160,771.0**	**388,665.0**	**376,463.0**	**180,690.0**	**1,138,689.0**
PROGRAM INFRASTRUCTURE						
Environmental Response Barges	**2,000.0**	**8,000.0**	**-**	**-**	**-**	**10,000.0**
Economic Action Plan	2,000.0	3,000.0	-	-	-	-
A-base	-	5,000.0	-	-	-	-
National Information Systems	**3,974.0**	**10,907.0**	**6,405.0**	**1,299.0**	**750.0**	**23,335.0**
- Investment	2,541.0	9,478.0	5,077.0	1,299.0	750.0	19,145 .0
- Refurbishment	1,433.0	1,429.0	1,328.0	-	-	4,190.0
Maritime Security	**10,353.0**	**-**	**-**	**-**	**-**	**10,353.0**
- Investment	10,353.0	-	-	-	-	10,353.0
MCTS	**25,215.0**	**26,414.0**	**23,421.0**	**24,171.0**	**23,276.0**	**122,497.0**
- Investment	5,217.0	12,649.0	8,874.0	8,604.0	9,340.0	44,684.0
- Refurbishment	19,998.0	13,765.0	14,547.0	15,567.0	13,936.0	77,813.0
Aids to Navigation	**10,316.0**	**8,164.0**	**7,863.0**	**11,229.0**	**10,311.0**	**47,883.0**
- Refurbishment	10,316.0	8,164.0	7,863.0	11,229.0	10,311.0	47,883.0
Environmental Response	**1,762.0**	**211.0**	**1,500.0**	**1,500.0**	**3,563.0**	**8,536.0**
- Investment	1,762.0	-	-	-	-	1,762.0
- Refurbishment	-	211.0	1,500.0	1,500.0	3,563.0	6,774.0
Waterways	**2,750.0**	**-**	**-**	**-**	**-**	**2,750.0**
- Refurbishment	2,750.0	-	-	-	-	
TOTAL PROGRAM INFRASTRUCTURE	**56,370.0**	**53,696.0**	**39,189.0**	**38,199.0**	**37,900.0**	**225,354.0**
TOTAL PLANNED SPENDING	**256,406.0**	**363,170.0**	**518,065.0**	**505,863.0**	**310,090.0**	**1,953,594.0**

Annex A: CCG Capital Expenditures

The Canadian Coast Guard uses a wide range of equipment and other physical assets as it carries out its day-to-day activities. For example, search-and-rescue activities typically require rescue vessels or helicopters, as well as communications equipment; similarly, moving goods safely through Canadian waters depends on having reliable aids to navigation and may require the services of icebreakers.

The infrastructure required to support CCG activities falls into two broad groups:

- **Equipment and other moveable assets**. These include communications equipment, radio towers and radar sites, as well as aids to navigation such as buoys and beacons. These assets have an estimated replacement value of $1.6 billion.
- **Fleet assets**. These assets include 116 vessels — search-and-rescue lifeboats, fishery science vessels, patrol vessels, light and heavy icebreakers, etc. — and 22 helicopters. These assets have an estimated replacement value of $10 billion.

These assets need to be systematically maintained and eventually replaced for CCG to be able to fulfil its mandate. This requires a long-term approach and significant financial resources, as capital expenditures account for a comparatively high percentage of our expenditures. Please note that the figures contained in the following pages may fluctuate throughout the fiscal year depending on availability of equipment and repair facilities and available funding: such as an emergency repair of a vessel as dictated by a Transport Canada inspection or the urgent requirement to repair a communication service/equipment related to search and rescue operations on a vessel or helicopter.

Capital expenditures for equipment and other moveable assets are grouped in terms of the CCG service involved; CCG capital expenditures for fleet assets are grouped in terms of the type of capital expenditure involved.

CCG funding for capital expenditures has a number of sources:

- Ongoing reference levels, which are reflected in the Long-term Capital Plan. This funding is for replacing or extending the life of critical assets. This funding is $43.1 million.
- Additional annual funding for asset refurbishment. This funding was introduced in Budget 2003, and it totals about $47 million a year. This is referred to as National Capital Spending Plan (NCSP) funding. CCG has increased this by $23 million in refit funding which was converted from the operating vote in order to consolidate all refit and refurbishment funding in one area. The total refurbishment funding is now $90 million.
- Transformational Plan funding which was received in 2006 which totals $16 million.
- Project slippage carried forward from previous years.
- Major Capital Projects (MCP) funding. This is funding for new vessels, including mid-shore and off-shore vessels, as well as air cushion vehicles.

Type of Asset	Expenditures by PAA Sub-Activity	Example of Expenditures	Forecast Expenditure, 2009-2010 (millions of dollars)
Equipment and other moveable assets	**Aids to Navigation**	Replacing shore-based and floating aids to navigation	10.4
	Marine Communications and Traffic Services	Upgrading various communication equipment at MCTS Centres and remote sites	25.2
	Environmental Response Services	Investing in Environmental Response equipment	1.8
	Maritime Security	Investing in critical surveillance and tracking systems	10.4
	Waterways Management Services	Detroit River channel restoration	2.8
	Lifecycle Asset Management	Investing in the enhancement of operational systems security	2.2
Fleet assets	**Coast Guard Fleet Operational Readiness**		
	Acquisition or replacement	Acquiring new vessels	60.4
	Major repairs, refits, and refurbishments	Refitting and refurbishing vessels and helicopters	80.3
	Vessel life extension	Extending vessel life	51.6
	System enhancement	Modernizing simulators	11.3
Total			**256.4**

Additionally, Budget 2009 provided CCG with $175M as part of the government-wide Economic Action Plan. These projects have been incorporated into CCG's capital planning process.

The tables in this annex indicate the project status for our projects in 2009-2010. Projects currently under way are listed first, followed by those approved in principle or awaiting funding.

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	2009-2010 Forecast	TEC Remaining
Aids to Navigation				
Projects Under Way				
• **Short-Range Fixed Aids Site Replacement/Refurbishment (Phase 2)** - Replace, remove, relocate, redesign, and/or refurbish many critical short-range fixed aids to navigation and associated site infrastructure in all CCG regions to address high-risk items associated with structure failure and health and safety codes.	18.5	8.7	3.2	6.6
• **Major Navigational Aids Refurbishment (Phase 2)** - Replace, remove, and/or refurbish many of the short-range major structures supporting shore-based fixed aids to navigation. Make a strategic investment in replacing/upgrading navigation aids with modern equipment involving the use of new technology.	18.4	7.9	3.8	6.7
• **Floating Aids to Navigation Refurbishment (Phase 2)** - Replace or refurbish floating aids to navigation and associated equipment to address codes and standards, health and safety, due diligence, and potential departmental liability issues in all regions.	17.4	8.0	3.4	6.0
Projects Approved in Principle, Awaiting Funding				
• **Differential Global Positioning System (DGPS) Refurbishment** - Replace and/or refurbish electronic equipment and site infrastructure at DGPS sites across Canada.	22.5	-	-	22.5
• **Fixed Aids to Navigation Site Refurbishment and Modernization (Phase 3)** - Replace, remove, relocate, redesign, and/or refurbish many critical short-range fixed aids to navigation and associated site infrastructure in all CCG regions to address high-risk items associated with structure failure and health and safety codes.	16.7	-	-	16.7
• **Major Navigational Aids Refurbishment and Modernization (Phase 3)** - Replace, remove, and/or refurbish many of the short-range major structures supporting shore-based fixed aids to navigation. Make a strategic investment in replacing/upgrading navigation aids with modern equipment involving the use of new technology.	17.2	-	-	17.2
• **Floating Aids Modernization and Refurbishment (Phase 3)** - Replace or refurbish floating aids to navigation and associated equipment, in many cases involving new technology.	18.0	-	-	18.0
Marine Communications and Traffic Services				
Projects Under Way				
• **MCTS Communications Control System (CCS) Equipment Replacement** - Replace Communications Control System (CCS) equipment at 22 MCTS Centres, along with the associated consoles, radio remote control equipment at remote sites, and two simulators at the new technical training facilities required at the CCG College, in Sydney, NS. Use of the latest digital technology will enable multifunction switching and simultaneous communications on different radio frequencies.	47.8	3.0	2.1	42.7
• **MCTS Communication Towers Refurbishment (Phase 2)** - Refurbish to baseline condition those MCTS communication towers identified as the highest priority in April 2006. The towers identified are those that do not meet current operational requirements or are at high risk of failure due to rust-out and overloading.	18.7	11.4	4.1	3.2
• **MCTS Communication Sites Refurbishment (Phase 2)** - Refurbish existing MCTS communication sites used by CCG across Canada to baseline condition. Work includes replacing or refurbishing equipment, buildings, trailers, roads, and transmission lines, and replacing fuel tank systems and spill containment structures and physical security to meet national and regional standards.	18.6	10.7	3.9	4.0

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	2009-2010 Forecast	TEC Remaining
• **Communications Systems Infrastructure Refurbishment (Phase 2)** - Refurbish communications systems and associated infrastructure, including MF-HF receivers and transmitters, VHF-DF antenna systems and satellite links, radars, UPS, and test infrastructure in all regions. It also includes consolidating the Prince Rupert Microwave Network by adding two microwave sites and includes four microwave links.	17.9	4.7	4.4	8.8
• **VHF Radio Refurbishment to Baseline** - Refurbish to baseline condition the MCTS very high frequency (VHF) radios, in all regions, that are obsolete or at risk of failure.	17.6	15.3	2.1	0.2
• **Arctic Telecommunication Refurbishment** - Bring the Arctic Telecommunications network/infrastructure back to baseline condition, by replacing obsolete HF, MF, VHF, UHF, and satellite communications equipment.	16.7	11.7	1.4	3.6
• **MCTS Replacement of the Vessel Traffic Operator Support System (VTOSS) in the Pacific Region** - A version of the National Integrated Information System on Marine Navigation (INNAV) that includes the interface for the Automatic Identification System (AIS) will be upgraded to incorporate the essential operational functionalities that are required by the Pacific Region. This upgraded version of INNAV, as well as the required new equipment, will be implemented in the Pacific Region only.	4.7	0.4	2.4	1.9
• **MCTS Tofino Radar Refurbishment** - Replace the existing "dark room" radar displays with digitized daylight displays, and complete other minor renovations and infrastructure modifications to enable daylight operations at the Tofino MCTS centre in the Pacific Region.	3.0	2.4	0.6	-
• **Very High Frequency (VHF) / Digital Selective Calling (DSC) Great Lakes and St. Lawrence** - Install shore-based Global Marine Distress and Safety System (GMDSS) VHF/DSC at select MCTS Centres and Remote Control Outlets (RCOs) along the Great Lakes (Central and Arctic Region) and the St. Lawrence River (Quebec Region).	8.5	7.3	0.1	1.1
• **MCTS Transmitter/Communication Systems Refurbishment (Phase 3)** - Refurbishment of MCTS transmitters and electronics. Project includes creation of Technical Solution Centres in each region.	17.7	0.6	2.7	14.4
Projects Approved in Principle, Awaiting Funding				
• **MCTS Information Logging System** - Replace the outdated Message Data System and automatic message broadcasting system (MDS/NAVTEX) with a new MCTS Logging System at 22 MCTS Centres.	4.6	-	-	4.6
• **MCTS Continuous Marine Broadcast Refurbishment** - Replace existing outdated Continuous Marine Broadcast equipment, including a completely automated text-to-speech capability, at Canadian MCTS Centres across Canada.	4.6	-	-	4.6
• **VHF-DF Direction Finding System** - Refurbish to baseline condition the very high frequency direction finding system, in all regions, that are obsolete or at risk of failure. Additional VHF-DF coverage may also be provided.	18.1	-	1.4	16.7
• **MCTS National Vessel Traffic Management Information System (VTMIS) Replacement** - Replace the National Information System on Marine Navigation (INNAV) by a VTMIS that would integrate all MS approved capabilities, mandates and data requirements.	39.2	-	-	39.2
• **MCTS Communication Towers Replacement (Phase 3)** - Refurbish to baseline condition those MCTS communication towers identified as the highest priority. The towers identified are those that will be are at high risk of failure in the near future due to rust-out and overloading.	18.1	-	-	18.1
• **MCTS Communication Sites Refurbishment (Phase 3)** - Refurbish existing MCTS communication sites used by CCG across Canada to baseline condition. Work includes replacing or refurbishing equipment, buildings, trailers, roads, and transmission lines, and replacing fuel tank systems and spill containment structures and physical security to meet national and regional standards.	18.1	-	-	18.1
Environmental Response Services				
Projects Under Way				
• **Arctic Environmental Response Equipment** - Invest in environmental response equipment for the Coast Guard's Arctic Environmental Response capability.	2.0	0.2	1.8	-
Projects Approved in Principle, Awaiting Funding				
• **Environmental Response Equipment Refurbishment** - Refurbish the CCG ER equipment by returning the assets back to baseline condition.	17.9	-	-	17.9

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	2009-2010 Forecast	TEC Remaining
Maritime Security				
Projects Under Way				
• **Automatic Identification System (AIS)** - Implement a national VHF AIS Service and a Long Range Identification and Tracking Service in Canada to enhance marine security and improve the safety of navigation in Canada.	25.0	13.5	10.4	1.1
Waterways				
Projects Under Way				
• **Detroit River Channel Restoration** - Restore the charted depths of the downstream end of the Livingstone Channel, allowing ships on the Great Lakes/St. Lawrence Seaway System unrestricted, safe and efficient passage between the upper and lower Great Lakes.	2.8	0.0	2.8	0.0
Lifecycle Asset Management				
Projects Under Way				
• **Configuration Management and Technical Data Management System** - Develop and implement a system to support enhanced material acquisition and lifecycle through a nationally managed information infrastructure.	10.4	0.8	0.8	8.8
Projects Approved in Principle, Awaiting Funding				
• **Asset Management System (AMS)** - Implement a national AMS that will include a fully integrated predictive maintenance capability for vessels based on the current deployed version and licensing of MIMS.	4.2	-	1.4	2.8
Coast Guard Fleet Operational Readiness				
Budget 2009 Economic Action Plan In its 2009 Budget, the Government of Canada announced that it was providing CCG with $175M as part of the government-wide Economic Action Plan. The specific planned projects are as follows:				
Projects Under Way				
Acquisitions				
Near-Shore Fisheries Research Vessels				
• **Two 18 meter Near-Shore Fisheries Research Vessels**	14.0	0.0	3.0	11.0
• **One 24 meter Near-Shore Fisheries Research Vessel**	10.0	0.0	1.0	9.0
Lifeboat Replacement Plan				
• **Five 47' Motor Lifeboats (Cape Class)**	20.0	0.0	8.0	12.0
Small Craft Acquisition Plan (SCAP)				
• **86 Small Craft: Fast Rescue Craft (FRC), Rigid Hull Inflatable (RHIB) and small work boats.**	14.0	0.0	7.0	7.0
Environmental Response (ER) Barges				
• **30 ER Barges**	10.0[7]	0.0	2.0	8.0
Vessel Life Extensions				
CCGS *Bartlett*	20.0	0.0	20.0	0.0
CCGS *Tracy*	20.0	0.0	20.0	0.0
CCGS *Limnos*	10.0	0.0	10.0	0.0
CCGS *Cape Roger*	12.0	0.0	0.0	12.0
CCGS *Tanu*	12.0	0.0	0.0	12.0

7 In addition to Economic Action Plan, this figure includes $5M to be funded through Vote 5.

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	2009-2010 Forecast	TEC Remaining
Major Repairs, Refits and Refurbishments				
Accelerated Vessel Refits (various vessels)	38.0	0.0	19.0	19.0
Acquisitions and Replacements				
Projects Under Way				
Off-Shore Fishery Science Vessels (OFSV)				
• **Off-Shore Fisheries Science Vessels** (MCP) - Replace three (3) vessels: CCGS *Alfred Needler* or CCGS *Wilfred Templeman*, CCGS *W. E. Ricker* and CCGS *Teleost*.	279.5	3.0	5.0	271.5
Offshore Oceanographic Science Vessels (OFSV)				
• **Offshore Oceanographic Science Vessel** (MCP) - Acquire a new vessel to replace CCGS *Hudson*.	108.9	0.8	1.6	106.5
Mid-Shore Patrol Vessels (MSPV)				
• **Mid-Shore Patrol Vessels** (MCP) - Replace four (4) maritime security patrol vessels: CCGS *Kitimat II*, CCGS *Arrow Post*, CCGS *Comox Post*, and a new vessel for C&P patrols.	212.5	10.6	11.5	190.4
Air Cushion Vehicles (ACV)				
• **CCG Air Cushion Vehicle** - Acquire an ACV model AP1-88/400, replacing an AP1-88/200 in Quebec Region.	27.9	21.1	2.0	4.8
Near-Shore Fishery Research Vessels				
• **CCGS *Shark* Replacement** - Construct and deliver to Central and Arctic Region a vessel to meet Science Program requirements as a replacement for CCGS *Shark*.	5.9	4.1	1.8	0.0
• **CCGS *J.L. Hart* Replacement** (unfunded EPA) - Replace the 20m inshore fisheries research vessel *J.L. Hart* with a more modern, more efficient vessel with greater multitasking capability.	8.2	0.2	0.0	8.0
• **CCGS *Pandalus III*** - Construct and deliver to Maritimes Region a vessel to meet Science Program requirements as a replacement for CCGS *Pandalus III*.	4.4	0.8	3.1	0.5
Small Craft Acquisition Plan (SCAP)				
• **SCAP** (all regions)	15.0	5.0	6.6	3.4
Projects Approved in Principle, Awaiting Funding				
Polar Icebreaker				
• **Polar Icebreaker (MCP)** - This acquisition was announced in the 2008 Federal Budget.	800.0	0.0	4.0	796.0
Helicopters				
• **Helicopter (spare 212)** – (3.5M @ U.S. exchange rate on 26/01/09)	3.9	0.0	3.9	0.0
Major Repairs, Refits, and Refurbishments				
Projects Under Way				
Refit Vessels (all CCG vessels to undergo some degree of refit)	40.6	-	40.6	-
Refit CCG Helicopters (all CCG helicopters to undergo some degree of refit)	6.2	-	6.2	-
NCSP Phase I				
• Refurbish Program Boats	9.1	8.9	1.5	-
• Refurbish Research Vessels	7.3	7.2	0.5	0.4
NCSP Phase II				
• Refurbish Air Cushioned Vehicles	3.3	1.4	0.7	1.2
• Refurbish Icebreakers	13.7	4.2	2.3	7.2

Project Description	Total Estimated Cost (millions of dollars)	TEC Used	2009-2010 Forecast	TEC Remaining
• Refurbish Light Icebreakers/Major Navaids Tenders.	8.8	0.7	3.0	5.1
• Refurbish Marine Service Vessels	8.5	4.1	3.0	1.4
• Refurbish Patrol Vessels	8.4	4.8	2.5	1.1
• Refurbish Offshore Research Vessels	9.1	0.1	1.1	7.9
Vessel Life Extensions				
Projects Under Way				
High Endurance Multitasked Vessels/Light Icebreakers				
• **CCGS *Griffon*** – Major Crane Replacement Project to replace the existing crane used for lifting marine aids and deploying scientific and emergency equipments	1.6	0.1	1.5	0.0
Offshore Oceanographic Science Vessels (OOSV)				
• **CCGS *John P. Tully VLE*** (EPA) - Undertake VLE on CCGS *John P. Tully*, a 69m offshore science research vessel that is 21 years old.	15.8	15.4	0.1	0.3
System Enhancements				
Projects Under Way				
• **Halon 1301 Replacement Program** (final year of project) - Acquire and install ozone-safe fire-fighting systems to replace the existing Halon 1301 systems on all CCG vessels within all Coast Guard regions to meet EC regulations by 2010.	10.4	9.4	1.0	0.0
• **Integrated Navigation Systems** - Procure and install a Shipboard Universal Automatic Identification System, DGPS, and Electronic Navigational Chart System on selected DFO/CCG vessels.	10.2	6.3	3.2	0.7
• **E-Mail Aboard Ships** - (final year of project). Deliver the capability for all shipboard personnel on 55 designated vessels to receive personally addressed e-mail from any other person or agency ashore; also provide intranet and Internet access.	9.1	8.2	0.7	0.2
• **CCG College Simulators** - Modernize two of the CCG College's simulators: the Marine Propulsion Plant Simulator and the Blind Pilotage Radar Simulator. Both simulators are beyond the normal 10-year industry standard for hardware and software support.	5.9	0.4	0.2	5.3
• **Fleet Activity Information System (FAIS)** - Upgrade . To upgrade existing obsolete system (1993), increase the security of the system, ensure the provision of timely information, and ensure compliance with Treasury Board policies.	4.3	0.6	1.5	2.2
• **Vessel Maintenance Management Review (VMMR)**	18.0	0.0	1.0	17.0
Projects Approved in Principle, Awaiting Funding				
• **Flight Following System (FFS)**	2.0	0.0	0.9	1.1
• **Vessel Tracking**	2.6	0.0	1.0	1.6
• **Replacement of a Specialty Vessel**	4.0	0.0	1.8	2.2
• **CCG Automated Performance Solution (CCGAPS)** – An Improvement and Upgrade Project	1.5	0.0	0.0	1.5
• **Ship to Shore Data Connectivity Project**	3.0	0.0	0.0	3.0
• **CCGS *Shamook* Replacement**	10.0	0.0	0.0	10.0
• **Channel Survey and Sounding Vessels (2)**	24.0	0.0	0.0	24.0
• **Mid-Shore Science Vessel Replacement –SWATH2**	60.0	0.0	0.0	60.0

Annex B: Research and Development Program

The ongoing projects for 2009-2010, listed below, have detailed deliverables that are required to achieve mission goals.

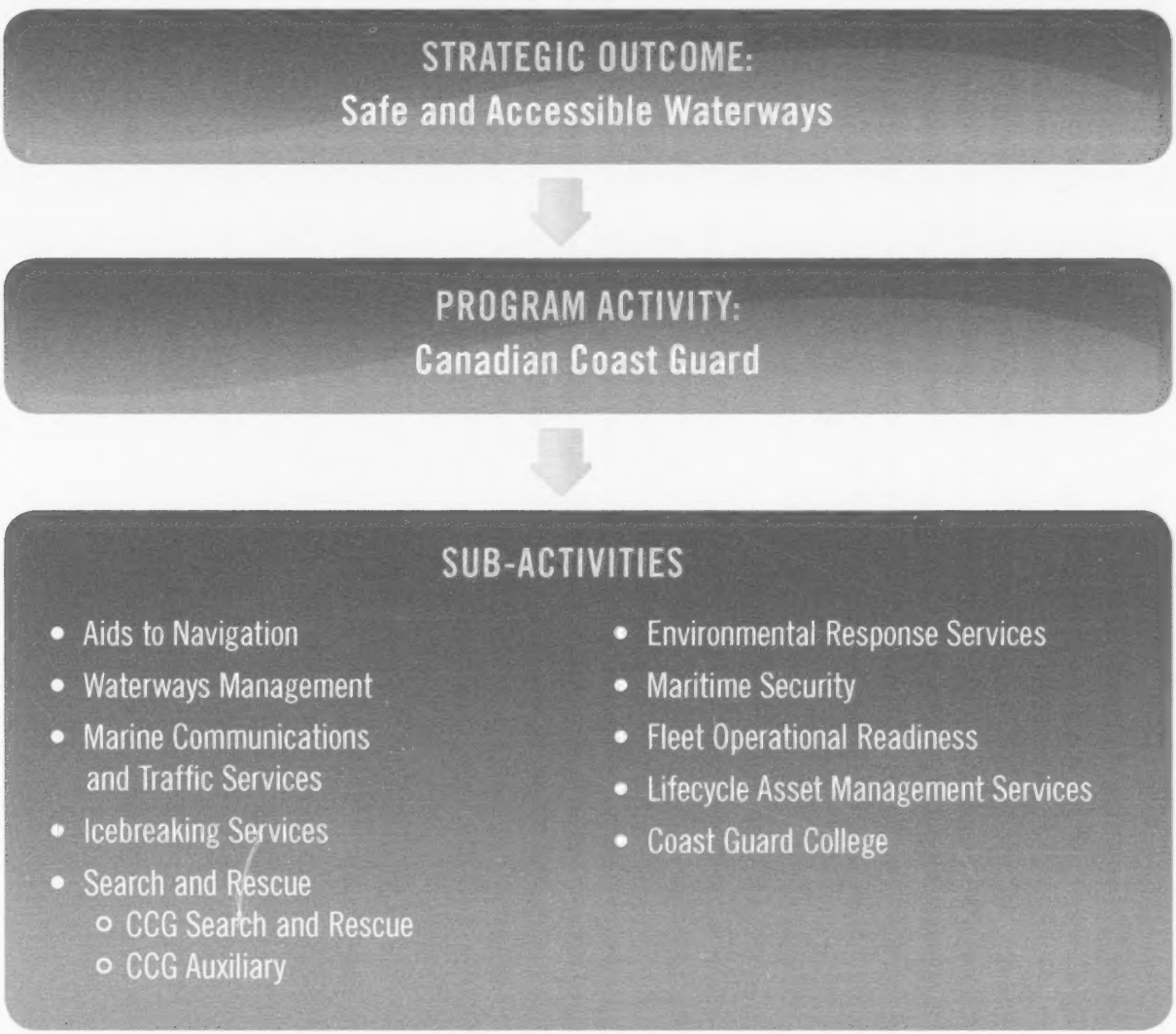
PROJECT CODE	PROJECT TITLE	TEC (000's)	2009/10 Funding (000's)
Aids to Navigation			
FJNF3	Four Season Lighted Spar Buoy (Quebec Region)	1,398.0	**85.0**
FQAP6	Accelerated Life Testing of Synthetic Moorings (Headquarters)	183.0	**83.0**
FQAP6	Continuation of Synthetic Mooring Residual Strength Field Trial (Headquarters)	21.0	**10.0**
Waterways Management Services			
FMCF3	Under Keel Clearance MODULE (A component of the Monitoring and Identification of Risks Integrated Tool (MIRIT) (Quebec Region)	399.6	**45.0**
Icebreaking Services			
FVGV6	Ice Hazard Radar (Headquarters)	250.0	**75.0**
Environmental Response Services			
FJMP3	Oil Dispersion in the Form of Oil-Mineral Aggregates in Ice-Encumbered Waters (Quebec Region)	470.5	**60.0**
		TOTAL	**358.0**

Annex C: CCG Program Activity Architecture

CCG's Program Activity Architecture (PAA) explains how we contribute to Safe and Accessible Waterways, one of DFO's three strategic outcomes.

The Canadian Coast Guard is one of several program activities in DFO's PAA. Like the other program activities, the Coast Guard program activity has a number of sub-activities, each of which contributes to the CCG program activity.

The image below shows the relationship among the Safe and Accessible Waterways strategic outcome, the CCG program activity, and CCG sub-activities.



Annex D: Auditor General's Recommendations (2000 and 2002):

CROSSWALK TO 2009-2010 BUSINESS PLAN COMMITMENTS

In its 2007 Status Report, the Auditor General found that the Coast Guard had not made satisfactory progress addressing recommendations from previous audits on the Fleet (2000) and marine navigational services (2002). The Auditor General noted that one of the contributing factors was that the Coast Guard had tried to deal with all of the previous recommendations simultaneously and, as a result, had not been able to complete any.

The 2007 Report recommended that the Coast Guard focus on establishing priorities for improvement, set clear achievable goals for those priority areas, allocate sufficient, appropriate resources, and plan and implement the changes by holding managers and organizational units accountable for results. The Canadian Coast Guard committed to using the business planning process to establish priorities for improvement in the context of delivering its programs and services.

In its "Managing the Coast Guard Fleet and Marine Navigational Services – Fisheries and Ocean Canada" Report, dated April 2008, the Senate Committee on Public Accounts (SCOPA) recommended that the Coast Guard Business Plan include an appendix cross-referencing the Plan's commitments with the Auditor General's findings. This Annex responds to that SCOPA recommendation.

Listed below are the Auditor General's 2000 and 2002 recommendations followed by the 2009-2010 Business Plan commitments which are linked to these recommendations. In a few instances, there are certain actions being taken by the Coast Guard which are not specific commitments within the Business Plan

---

Auditor General's Recommendations - 2000

1. **The Department should review how the fleet fits into its current organizational and accountability structure and take measures to ensure that the fleet can operate in a cost-effective manner (paragraph 31.72)**

   Improve National Consistency in Human Resources Management (page 26)
   - Launch and begin transition to a national Standard Organization. Migration to the national Standard Organization will be implemented over a 3-year period.

2. **The Department should address the weaknesses associated with its key fleet management processes, including:**

   a. **Establishing clear, concrete and realistic program performance expectations that include a long-term perspective**

   Service Level Agreements with DFO Clients (page 13)
   - Implement Service Level Agreements with Science and Fisheries and Aquaculture Management as a 3 year pilot, and review and improve performance measures.

   b. **Establishing a long-term fleet planning and funding horizon**

   Ongoing Improvements in Fleet Management
   - See commitments under Recommendation 3.

   c. **Developing service accords between the programs and the fleet**

   Service Level Agreement with DFO Clients (page 13)
   - See commitment under Recommendation 2(a).

   d. **Establishing budgetary processes that support accountability**
   - Completed.

e. **Setting up integrated information systems to enable the Department to monitor and account for the actual performance of the fleet in terms of service and cost.**

Ongoing Improvements in Fleet Management (page 50)
- Complete architecture design for Fleet Activity Information System (FAIS) upgrade project.

Also see commitment under Recommendation 2(a).

f. **Implementing costing policies that support the use of the lowest-cost alternative in acquiring service while meeting departmental objectives (paragraph 31.73)**

- Completed.

3. **The Department should consider a longer-term strategy to renew its aging fleet. Such a strategy should take into consideration the changing nature of program requirements, the impact of technological change and the potential for alternative means of acquiring the service needed (paragraph 31.106)**

Integrated Investment Plan
- Develop an Integrated Investment Planning Framework and Integrated Investment Plan (page 17).

Procurement of New and Replacement Vessels (page 16)
- Award contract to build up to 12 Mid-Shore Patrol Vessels
- Launch detailed design activities for Offshore Fishery Science Vessels
- Launch detailed design activities for Offshore Oceanographic Science Vessels
- Finalize Polar Icebreaker Preliminary Project Approval for submission to Treasury Board
- Award contract to build 5 47 ft SAR Motor Lifeboats
- Award the contract to build 2 18 m Science Vessels
- Award the contract to build a 24 m Science Vessel
- Award the contract to build 30 replacement Environmental Response Barges
- Purchase and acceptance of 30 small craft.

4. **The Department should complete the development and implementation of lifecycle management policies and procedures for its fleet (paragraph 31.107)**

Improved Maintenance of the Existing Fleet (page 51)
- Implement the Engineering and Maintenance Manual for Fleet Vessels.

Vessel Maintenance Management Review (page 20)
- Implement the CCG Vessel Maintenance Management Policy Governance (CCG Authority and Accountability Directive for Vessel Maintenance Management).
- Finalize CCG vessel condition assessment for all CCG vessels, and develop a Vessel Continuous Condition Survey Program.
- Begin to establish a Centre of Expertise for Vessel Maintenance management and prepare to add additional Marine Engineering personnel to directly support CCG regions and vessels.

Continued Improvement in Lifecycle Management Practices for all CCG Assets (page 53)
- Install the Asset Management System (AMS), complete with the maintenance management module, onboard another 36 vessels.

5. **The Department should ensure that the fleet activity is supported by information systems that produce integrated, timely, reliable and relevant information (paragraph 31.108)**

Ongoing Improvement in Fleet Management (page 50)
- See recommendation 2(e).

6. **The Department should develop a human resource strategy for the fleet to address the need to maintain the skills and knowledge of ship-based personnel and to ensure that a sufficient number of qualified officers and crew are available in the future. The strategy should consider a long-term approach to the collective agreements with ship's personnel so that they can be administered in an efficient and economical manner and can support the fleet's operational requirements (paragraph 31.137).**

Through CCG's Strategic Human Resources Plan, a number of strategies, initiatives and frameworks are being put into place to address key organizational needs:

- Recruitment and Diversity (page 25):
  - Establish a bi-annual report card system to track progress on the 2008-2011 Employment Equity Management Action Plan.
  - Ensure the Operational Women's Network is fully engaged.

- Training and Learning (page 25):
  - Continue the second phase of the National Leadership Development Pilot Program.
  - Promulgate the final version of the Learning and Development Framework.
  - Establish clear and transparent learning and development budgets in each organization.
  - Enhance CCG College official language training capacity.
  - Develop a Ships' Crew Certification Program (page 51).

- Improve National Consistency in Human Resources Management (page 26):
  - Launch and begin the transition to the standard organization.

7. **The Department should regularly analyze payroll costs related to the fleet and take action to control such costs, where necessary (paragraph 31.138)**

Salary Management Information System (SMIS) - Consistent Business Management Practices (page 20)

- Put into practice the common Salary Management Information System procedures.

Fleet Operational Readiness (page 50)

- Finalize standardized crewing matrix predicated on competency (crewing) profiles.

Auditor General's Recommendations - 2002

8. **The Canadian Coast Guard should ensure that there are up-to-date national policies, standards and levels of service expectations for its navigational support services. It should also develop the capability to monitor the implementation of these policies, standards, and expectations. (paragraph 2.53)**

Levels of Service Review (page 13)

- Reissue the Levels of Service and Service Standards document.
- Develop and implement an ongoing Level of Service engagement strategy by program.

Aids to Navigation 21st Century (AToN21) (page 18)

- Complete the modernization of three additional aids to navigation directives (page 18).
- Produce an AToN21 project close-out report.

Upgrade Vessel Traffic Information Systems (page 19)

- Procure Integrated Information System on Marine Navigation hardware, install and configure system and deliver technical training.

Search and Rescue Needs Analysis (page 39)

- Develop an action plan to implement the appropriate recommendations from the Search and Rescue needs analysis.

9. **For its navigational support services and boating safety activities, Fisheries & Oceans Canada should do the following: Note: the boating safety activities (Office of Boating Safety) were transferred to Transport Canada in 2003.**

   a. **Complete the implementation of its results-based management and accountability frameworks;**

   Strategic Program Framework for CCG's Maritime Services programs (page 22)

   - Complete a systematic examination of all Maritime Services programs, using the Strategic Program Framework and develop an action plan.
   - Engage Maritime Services key partners to clarify needs, capacities, roles, responsibilities, and accountabilities (page 22).

   b. **Establish clear, measurable, concrete targets for the identified outputs and immediate outcomes for each framework;**

   - Please see commitment under Recommendation 9(a).

   c. **Identify who is accountable for achieving targets and managing resources;**

   - Please see commitment under Recommendation 9(a).

   d. **Align budgeting and resource allocation with the frameworks; and**

   - Completed.

   e. **Develop or identify sources of information to measure results (paragraph 2.68)**

   - Please see commitment under Recommendation 9(a).

   Over time CCG will try to improve the type and quality of data to better reflect and measure performance*

10. **The Coast Guard should complete and implement its draft guidance on risk management (paragraph 2.73)**

    - Completed.

11. **Fisheries & Oceans Canada should develop and implement strategies to modernize and integrate the delivery of its navigational support services to meet user needs (paragraph 2.77)**

    e-Navigation (page 18)

    - Identify mariners' requirements for e-Navigation
    - Begin to develop an implementation strategy for e-Navigation
    - Also see commitment under Recommendation 8

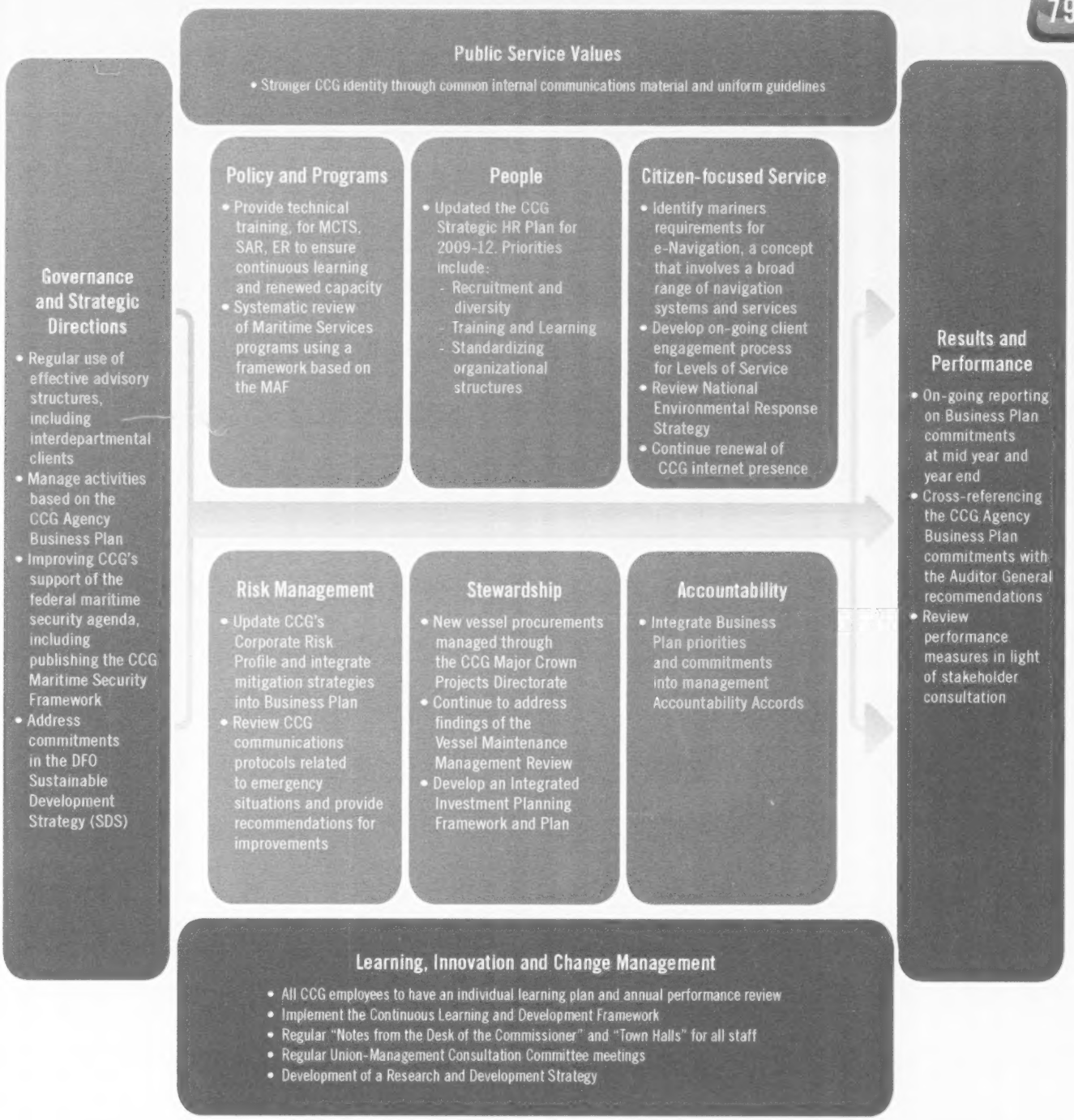
12. **Fisheries and Oceans Canada should develop and implement an overall strategy for the future of its light stations, considering maritime safety and heritage objectives (paragraph 2.90)**

    - CCG is in the process of identifying surplus lighthouses as required under the new Act to Protect Heritage Lighthouses. A surplus lighthouse list is to be published by May 30, 2010 and maintained for 2 years, until May 30, 2012.*

* Please note that this is not a Business Plan commitment.

Annex E: Management Agenda

The Coast Guard has a clear management agenda that is consistent with the broader Management Accountability Framework (MAF) that applies to all departments and agencies (http://www.tbs-sct.gc.ca/maf-crg/documents/booklet-livret/text-texte_e.asp#g1). The following chart lists some of the initiatives and activities that the Coast Guard is undertaking over the next three years that relate to the 10 elements of the MAF.


Public Service Values
• Stronger CCG identity through common internal communications material and uniform guidelines
Governance and Strategic Directions
• Regular use of effective advisory structures, including interdepartmental clients
• Manage activities based on the CCG Agency Business Plan
• Improving CCG's support of the federal maritime security agenda, including publishing the CCG Maritime Security Framework
• Address commitments in the DFO Sustainable Development Strategy (SDS)
Policy and Programs
• Provide technical training, for MCTS, SAR, ER to ensure continuous learning and renewed capacity
• Systematic review of Maritime Services programs using a framework based on the MAF
People
• Updated the CCG Strategic HR Plan for 2009-12. Priorities include:
- Recruitment and diversity
- Training and Learning
- Standardizing organizational structures
Citizen-focused Service
• Identify mariners requirements for e-Navigation, a concept that involves a broad range of navigation systems and services
• Develop on-going client engagement process for Levels of Service
• Review National Environmental Response Strategy
• Continue renewal of CCG internet presence
Risk Management
• Update CCG's Corporate Risk Profile and integrate mitigation strategies into Business Plan
• Review CCG communications protocols related to emergency situations and provide recommendations for improvements
Stewardship
• New vessel procurements managed through the CCG Major Crown Projects Directorate
• Continue to address findings of the Vessel Maintenance Management Review
• Develop an Integrated Investment Planning Framework and Plan
Accountability
• Integrate Business Plan priorities and commitments into management Accountability Accords
Results and Performance
• On-going reporting on Business Plan commitments at mid year and year end
• Cross-referencing the CCG Agency Business Plan commitments with the Auditor General recommendations
• Review performance measures in light of stakeholder consultation
Learning, Innovation and Change Management
• All CCG employees to have an individual learning plan and annual performance review
• Implement the Continuous Learning and Development Framework
• Regular "Notes from the Desk of the Commissioner" and "Town Halls" for all staff
• Regular Union-Management Consultation Committee meetings
• Development of a Research and Development Strategy

List of Acronyms

AC	Assistant Commissioner
ACV	Air Cushion Vehicle
AG	Auditor General
AIS	Automatic Identification System
AMS	Asset Management System
ATN	Aids to Navigation
AtoN21	Aids to Navigation of the 21st Century
C&A	Central and Arctic
C&P	Conservation and Protection
CCG	Canadian Coast Guard
CCGA	Canadian Coast Guard Auxiliary
CCGAPS	CCG Automated Performance Solution
CCGC	Canadian Coast Guard College
CCGOTP	CCG Officer Training Program
CCS	Communications Control System
CHS	Canadian Hydrographic Service
CLF	Common Look and Feel
CMAC	Canadian Marine Advisory Council
CMRA	Canadian Marine Rescue Association
COE	Centre of Expertise
CSA	Canadian Standards Association
DF	Direction Finding
DG	Director General
DFO	Fisheries and Oceans Canada
DG	Director General
DGPS	Differential Global Positioning System
DND	Department of National Defence
DSC	Digital Selective Calling
EC	Environment Canada
ED	Executive Director
EEMAP	Employment Equity Management Action Plan
EPA	Effective Project Approval
ER	Environmental Response
FAIS	Fleet Activity Information System
FAM	Fisheries and Aquaculture Management
FERP	Federal Emergency Response Plan
FFS	Flight Following System
FMO	Federal Monitoring Officer
FRC	Fast Rescue Craft
GMDSS	Global Maritime Distress and Safety System
HF	High Frequency
HRCS	Human Resources and Corporate Services
IALA	International Association of Marine Aids to Navigation and Lighthouse Authorities
IBMS	Integrated Business Management Services
IMO	International Maritime Organization
INNAV	Information System on Marine Navigation
ITS	Integrated Technical Services
JRCC	Joint Rescue Coordination Centre
LCM	Lifecycle Management
LCMS	Lifecycle Management System
LED	Light-emitting Diode
LMAC	Local Marine Advisory Council
LO	Liaison Officer
LOS	Levels of Service
LRIT	Long Range Identification and Tracking
LTCP	Long-Term Capital Plan
MAF	Management Accountability Framework
MB	Management Board
MCP	Major Crown Projects
MCPD	Major Crown Projects Directorate
MCTS	Marine Communications and Traffic Services
MCTSO	Marine Communications and Traffic Services Officer
MDS	Message Data System
MELDEV	Marine Electronics Development
MEO	Marine Enforcement Officer
MERP	Marine Event Response Plan
MF	Medium Frequency
MIMS	Maintenance Information Management System
MITS	Management of Information Technology Security

MMET	Marine Maintenance and Equipment Training
MRSC	Marine Rescue Sub-Centre
MS	Maritime Services
MSET	Marine Security Enforcement Team
MSOC	Marine Security Operations Centre
MSPV	Mid-Shore Patrol Vessel
NACGF	North Atlantic Coast Guard Forum
NAFO	Northwest Atlantic Fisheries Organization
NAVAREA	Navigational Area
NCSP	National Capital Spending Plan
NL	Newfoundland and Labrador
NLFR	National Labour Force Renewal
NMAB	National Marine Advisory Board
NMWD	National Model Work Description
NOTMAR	Notices to Mariners
NOTSHIP	Notices to Shippers
NPCGF	North Pacific Coast Guard Forum
NRC	National Research Council
NRCan	Natural Resources Canada
NSERC	Natural Sciences and Engineering Research Council of Canada
O&M	Operations and Maintenance
OFSV	Offshore Fisheries Science Vessels
OAG	Office of the Auditor General
OFSV	Offshore Fishery Science Vessel
OGD	Other Government Departments
OMOC	Olympic Games Marine Operations Centre
OOSV	Offshore Oceanographic Science Vessel
OSC	On-Scene Commander
OWN	Operational Women's Network
PAA	Program Activity Architecture
PERD	Program of Energy, Research and Development
PRO	Pollution Response Officer
PRS	Performance Review System
PSES	Public Service Employee Survey
PWGSC	Public Works and Government Services Canada
R&D	Research and Development
RCMP	Royal Canadian Mounted Police
RCO	Remote Control Outlet
RFP	Request for Proposal
RHIB	Rigid Hull Inflatable
RO	Radio Operations
SAC	Strategic Advisory Council
SAR	Search and Rescue
SCAP	Small Craft Acquisition Program
SDS	Sustainable Development Strategy
SLA	Service Level Agreement
SMIS	Salary Management Information System
SOA	Special Operating Agency
SOLAS	International Convention for the Safety of Life at Sea
TBS	Treasury Board Secretariat
TC	Transport Canada
TDC	Transportation Development Centre
TEC	Total Estimated Cost
TSB	Transportation Safety Board of Canada
UHF	Ultra High Frequency
UNCLOS	United Nations Convention on the Law of the Sea
UPS	Ultraviolet Photoelectron Spectroscopy
USCG	United States Coast Guard
VHF	Very High Frequency
VLE	Vessel Life Extension
VMMR	Vessel Maintenance Management Review
VTMIS	Vessel Traffic Management Information System
VTOSS	Vessel Traffic Operator Support System
VTS	Vessel Traffic Services

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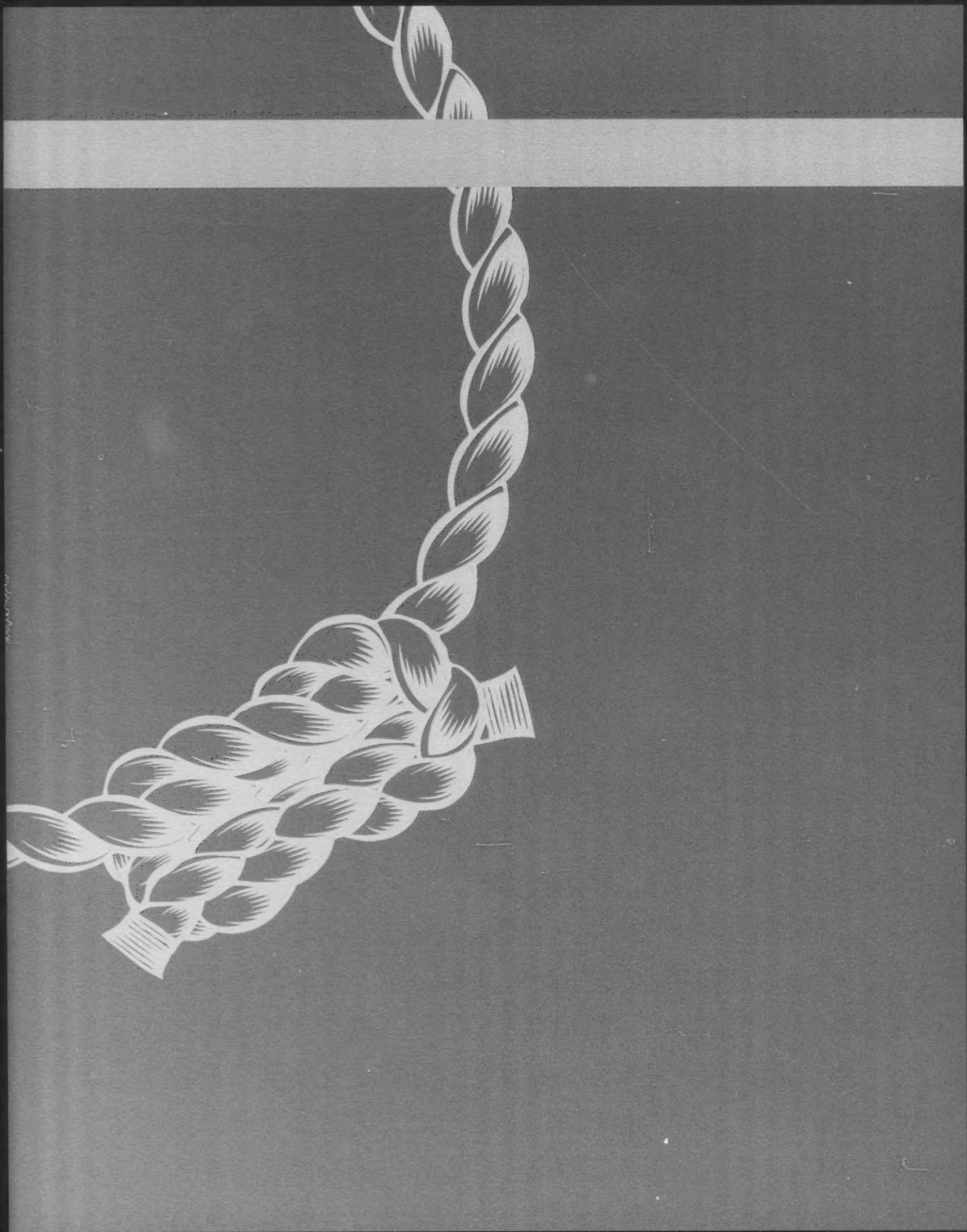
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